

# STIC Search Report

## STIC Database Tracking Number: 191638

TO: Ben Sackey

Location: REM 5B31 Art Unit: 1626

June 5, 2006

Sparch Notes

Case Serial Number: 10/717237

From: Kathleen Fuller Location: EIC 1700 REMSEN 4B28

Phone: 571/272-2505

Kathleen.Fuller@uspto.gov

Ocarcii Notes	
	•
·	
,	
	·



W. Julan

Access DB# 191638

### SEARCH REQUEST FORM

Scientific and Technical Information Center

Requester's Full Name: BEN Art Unit: 1626 Phone N Mail Box and Bldg/Room Location:	SACKEY umber 30 2 -0704 REM 5 8 3 / Resu	Examiner #: 73489 Date: 5/31/06  Serial Number: 10/717, 237  Its Format Preferred (circle): PAPER DISK E-MAIL
If more than one search is submi		e searches in order of need.
Include the elected species or structures, ke	ywords, synonyms, acrony hat may have a special mea	is specifically as possible the subject matter to be searched.  yms, and registry numbers, and combine with the concept or aning. Give examples or relevant citations, authors, etc, if abstract.
Title of Invention: N - Ayl	-2-0×936/1din	one-5-carboxamilles and their derivatives
Inventors (please provide full names):	Hester e	f d
Earliest Priority Filing Date: 71	121102	
*For Sequence Searches Only* Please include appropriate serial number.	e all pertinent information (p	parent, child, divisional, or issued patent numbers) along with the
B - c+2 -	•	•
is sindures (1)(1)		
is situatures (G)	J (b)	sherein het a y-net is aptimaly
) is - N(1)C(x)-R, h	et, or the	wherein het a y-het is aptimally ovided that when A is (IV) WI
Substituted and -	3 00 20/1	
is not - y-het a	ne4	
x is -0 - or -5 -		
Y S. NH, 0-,	S - ·	
> (a - f).		
July		
**************	******	********
STAFF USE ONLY Searcher:	Type of Search  NA Sequence (#)	Vendors and cost where applicable
Searcher Phone #:	AA Sequence (#)	Dialog
Searcher Location:	Structure (#)	Questel/Orbit
Date Searcher Picked Up:	Bibliographic	Dr.Link
Date Completed: 6/5/06	Litigation	Lexis/Nexis
Searcher Prep & Review Time: 40	Fulltext	Sequence Systems
Clerical Prep Time:	Patent Family	WWW/Internet
Online Time: 59	Other	Other (specify)

SACKEY 10/717237 06/05/2006 Page 1

=> file reg FILE 'REGISTRY' ENTERED AT 16:53:13 ON 05 JUN 2006 USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT. PLEASE SEE "HELP USAGETERMS" FOR DETAILS.

PLEASE SEE "HELP USAGETERMS" FOR DETAILS.
COPYRIGHT (C) 2006 American Chemical Society (ACS)

Property values tagged with IC are from the ZIC/VINITI data file provided by InfoChem.

STRUCTURE FILE UPDATES: 4 JUN 2006 HIGHEST RN 886746-35-6 DICTIONARY FILE UPDATES: 4 JUN 2006 HIGHEST RN 886746-35-6

New CAS Information Use Policies, enter HELP USAGETERMS for details.

TSCA INFORMATION NOW CURRENT THROUGH January 6, 2006

Please note that search-term pricing does apply when conducting SmartSELECT searches.

Structure search iteration limits have been increased. See HELP SLIMITS for details.

REGISTRY includes numerically searchable data for experimental and predicted properties as well as tags indicating availability of experimental property data in the original document. For information on property searching in REGISTRY, refer to:

http://www.cas.org/ONLINE/UG/regprops.html

=> file hcapl
FILE 'HCAPLUS' ENTERED AT 16:53:18 ON 05 JUN 2006
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.
COPYRIGHT (C) 2006 AMERICAN CHEMICAL SOCIETY (ACS)

Copyright of the articles to which records in this database refer is held by the publishers listed in the PUBLISHER (PB) field (available for records published or updated in Chemical Abstracts after December 26, 1996), unless otherwise indicated in the original publications. The CA Lexicon is the copyrighted intellectual property of the the American Chemical Society and is provided to assist you in searching databases on STN. Any dissemination, distribution, copying, or storing of this information, without the prior written consent of CAS, is strictly prohibited.

FILE COVERS 1907 - 5 Jun 2006 VOL 144 ISS 24 FILE LAST UPDATED: 4 Jun 2006 (20060604/ED)

New CAS Information Use Policies, enter HELP USAGETERMS for details.

SACKEY 10/717237 06/05/2006

This file contains CAS Registry Numbers for easy and accurate substance identification.

Page 2

=> d que

1 SEA FILE=HCAPLUS ABB=ON US2003-717237/AP L21

L27

NH ~ C ~ G2 Q√Hy Cb G4 A @10 11 12 @13 14 19 20 @21

239 structures from quest

applicant only printed 1

VAR G1=HY/13/10 VAR G2=0/S

VAR G3=HY/21

REP G4 = (0-4) A

VAR G5=C/N

REP G6=(2-3) CH2

REP G7=(1-4) CH2

NODE ATTRIBUTES:

DEFAULT MLEVEL IS ATOM

GGCAT IS MCY AT

DEFAULT ECLEVEL IS LIMITED

ECOUNT IS E1 O AT

#### **GRAPH ATTRIBUTES:**

RING(S) ARE ISOLATED OR EMBEDDED

NUMBER OF NODES IS 25

STEREO ATTRIBUTES: NONE

L29 SCR 1841

L31 239 SEA FILE=REGISTRY SSS FUL L27 AND L29

L33 35 SEA FILE=HCAPLUS ABB=ON L31

L34 32 SEA FILE=HCAPLUS ABB=ON L33(L)PREP/RL L36 1 SEA FILE=HCAPLUS ABB=ON L21 AND L34

=> d l36 bib abs ind fhitstr

L36 ANSWER 1 OF 1 HCAPLUS COPYRIGHT 2006 ACS on STN

AN2004:453033 HCAPLUS

DN 141:23519

TT Preparation of N-[4-(piperazin-1-yl)-phenyl]-2-oxazolidinone-5-carboxamide derivatives for therapeutic use as antibacterial agents

IN Harris, Christina R.; Hester, Jackson Boling, Jr. PA Pharmacia & Upjohn Company, USA
SO PCT Int. Appl., 155 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1
PATENT NO. KIND DATE
PI WO 2004045616 A1 20040603

	PATENT NO.					KIND DATE				2	APPL	ICAT		DATE						
					-	<b></b> -	<del>-</del>													
ΡI	WO 2004045616				A1 20040603					WO 2	003-	IB53		20031119						
		W:	ΑE,	AG,	AL,	AM,	AM, AT, AU, AZ, F			BA,	BA, BB, BG, BR, BW, I				BY,	ΒZ,	CA,	CH,		
			CN,	CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	EG,	ES,	FI,	GB,	GD,		
			GE,	GH,	GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	ΚE,	KG,	KP,	KR,	KZ,	LC,		
			LK,	LR,	LS,	LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	ΜZ,	NI,	NO,		
			NZ,	OM,	PG,	PH,	PL,	PT,	RO,	RU,	SC,	SD,	SE,	SG,	SK,	SL,	SY,	ТJ,		
			TM,	TN,	TR,	TT,	TZ,	UA,	ŪĠ,	US,	UZ,	VC,	VN,	YU,	ZA,	ZM,	ZW			
		RW:	BW,	GH,	GM,	ΚE,	LS,	MW,	MZ,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	AM,	AZ,		
			BY,	KG,	KZ,	MD,	RU,	TJ,	TM,	AT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,	EE,		
			ES,	FI,	FR,	GB,	GR,	HU,	ΙE,	IT,	LU,	MC,	NL,	PT,	RO,	SE,	SI,	SK,		
			TR,	BF,	ВJ,	CF,	CG,	CI,	CM,	GA,	GN,	GQ,	GW,	ML,	MR,	NE,	SN,	TD,	TG	
	CA 2502017			AA		2004	0603	CA 2003-2502017						20031119						
				A1		2004	0615	AU 2003-280143						20031119						
										US 2003-717237										
										EP 2003-772516										
						DE,														
			•		•	LV,				-		-						·		
	BR	2003	•	-	-	-	-	-		BR 2003-16483										
	JΡ	2006	5090	35		T2		2006	0316	JP 2004-570322										
PRAI	US	2002	-428	025P				2002												
		2003						2003	0206											
		2003						2003												
os		RPAT				,,,														
GI																				

AB Oxazolidinone-5-carboxamide derivs., such as I [R = amine substituted Ph or phthalimido; R1 = H, F; R2 = acyl or thioacyl; X = alkylene or heteroalkyl linking group; ], were prepared for use in pharmaceutical compns. as antibacterial agents. Thus, thioamide II (R2 = CSCH2Me, R3 = NEt2) was prepared via a reaction sequence which comprised an N-acylation reaction of [[(5S)-3-[3-fluoro-4-(1-piperazinyl)phenyl]-2-oxo-5-oxazolidinyl]methyl]carbamic acid 1,1-dimethylethyl ester with 4-(hydroxymethyl)phenoxyacetic acid to give alc. II (R2 = CO2Me3, R3 = OH), followed by conversion of the alc. to the corresponding bromide II

```
(R2 = CO2Me3, R3 = Br), amination of the bromide with Et2NH to give
     monoprotected-amine II (R2 = CO2Me3, R3 = NEt2), deprotection to form
     amine II (R2 = H, R3 = NEt2) and, finally, thioacylation of the amine with
     MeCH2CS2Et to give the target thioamide. The prepared carboxamides were
     assayed for inhibitory activity against a panel of organisms, such as S.
     aureus, S. pneumonia and H. influenzae.
IC
     ICM A61K031-496
     ICS A61K031-422; A61K031-5355; C07D263-20; C07D413-10
CC
     28-6 (Heterocyclic Compounds (More Than One Hetero Atom))
     Section cross-reference(s): 1, 10, 63
ST
     piperazinyl phenyl oxazolidinone amide prepn antibacterial agent; drug
     delivery system piperazinyl phenyl oxazolidinone amide prepn antibacterial
     Infection
IT
        (bacterial, treatment; preparation of N-[4-(piperazin-1-yl)-phenyl]-2-
        oxazolidinone-5-carboxamide derivs. for therapeutic use as
        antibacterial agents)
TТ
     Antibacterial agents
     Drug delivery systems
        (preparation of N-[4-(piperazin-1-yl)-phenyl]-2-oxazolidinone-5-carboxamide
        derivs. for therapeutic use as antibacterial agents)
                    697804-60-7P 697804-62-9P 697804-65-2P
ΤТ
     697804-57-2P
     697804-92-5P
     RL: BSU (Biological study, unclassified); RCT (Reactant); SPN (Synthetic
     preparation); THU (Therapeutic use); BIOL (Biological study); PREP
     (Preparation); RACT (Reactant or reagent); USES (Uses)
        (preparation of N-[4-(piperazin-1-yl)-phenyl]-2-oxazolidinone-5-carboxamide
        derivs. for therapeutic use as antibacterial agents)
IT
     697804-23-2P 697804-24-3P 697804-25-4P
     697804-26-5P 697804-27-6P 697804-28-7P
     697804-29-8P 697804-30-1P 697804-31-2P
     697804-32-3P 697804-33-4P 697804-34-5P
     697804-35-6P 697804-36-7P 697804-37-8P
     697804-38-9P 697804-39-0P 697804-40-3P
     697804-41-4P 697804-42-5P 697804-43-6P
     697804-44-7P 697804-46-9P 697804-48-1P
     697804-49-2P 697804-50-5P 697804-51-6P
     697804-52-7P 697804-53-8P 697804-54-9P
     697804-55-0P 697804-56-1P 697804-58-3P
     697804-59-4P
                    697804-61-8P
                                                  697804-64-1P
                                   697804-63-0P
     697804-66-3P 697804-67-4P 697804-68-5P
     697804-69-6P 697804-71-0P 697804-72-1P
     697804-73-2P 697804-74-3P 697804-75-4P
     697804-76-5P 697804-77-6P 697804-78-7P
     697804-79-8P 697804-80-1P 697804-81-2P
     697804-82-3P 697804-83-4P 697804-84-5P
     697804-85-6P 697804-86-7P 697804-87-8P
     697804-88-9P 697804-89-0P 697804-90-3P
     697804-91-4P 697804-93-6P 697804-94-7P
     697804-95-8P 697804-96-9P 697804-97-0P
     RL: BSU (Biological study, unclassified); SPN (Synthetic preparation); THU
     (Therapeutic use); BIOL (Biological study); PREP (Preparation);
     USES (Uses)
        (preparation of N-[4-(piperazin-1-yl)-phenyl]-2-oxazolidinone-5-carboxamide
        derivs. for therapeutic use as antibacterial agents)
IT
     56-40-6, Glycine, reactions
                                   103-84-4, Acetanilide
                                                           105-56-6, Ethyl
     cvanoacetate
                    107-95-9, β-Alanine
                                          108-30-5, Succinic anhydride,
     reactions
                108-55-4, Glutaric anhydride
                                              109-01-3, N-Methylpiperazine
     109-89-7, Diethylamine, reactions 110-91-8, Morpholine, reactions
     123-62-6, Propionic anhydride 298-12-4, Glyoxylic acid 350-46-9,
```

```
577-59-3, o-Nitroacetophenone
                                                               870-73-5, Ethyl
     1-Fluoro-4-nitrobenzene
     1-Fluoro-4-nitrobenzene 577-59-3, o-Nitroacetophenone 870 dithioacetate 998-79-8, Ethyl dithiopropionate 1118-68-9,
                                                  3984-34-7,
                                      1142-20-7
     N, N-Dimethylglycine
                          1138-80-3
                                         4521-28-2, 4-(4-Methoxyphenyl)butanoic
     3-(4-Chlorobenzoyl) propionic acid
            4530-20-5
                       4619-20-9, 4-(4-Methylphenyl)-4-oxobutanoic acid
     5415-95-2, Methyl dithiopropionate 5466-84-2, 4-Nitrophthalic anhydride
                                                             6340-79-0,
     5600-62-4, 4-(4-Nitrophenyl)butanoic acid 6328-00-3
     3-(4-Bromobenzoyl) propionic acid
                                       29022-11-5
                                                    68858-21-9,
                                           87512-31-0
                                                       100632-57-3
     4-(Hydroxymethyl)phenoxyacetic acid
     103321-49-9
                                               174649-07-1
                                                             188974-04-1
                   103321-50-2
                                154590-66-6
     273376-95-7
                   345224-36-4, Ethyl cyclopropanecarbodithioate
                                                                   415684-05-8
                                                                 612056-04-9
     570390-86-2, O-(3,3-Diphenylpropyl) difluoroethanethioate
     697806-14-7
     RL: RCT (Reactant); RACT (Reactant or reagent)
        (preparation of N-[4-(piperazin-1-yl)-phenyl]-2-oxazolidinone-5-carboxamide
        derivs. for therapeutic use as antibacterial agents)
TΤ
     5473-15-4P
                 6945-94-4P 10133-88-7P
                                            15728-08-2P
                                                          52240-17-2P
                                               119152-42-0P
     57498-54-1P
                  80937-24-2P
                                 99855-54-6P
                                                             337910-24-4P
     697804-99-2P 697805-00-8P 697805-01-9P
     697805-02-0P 697805-03-1P 697805-04-2P 697805-05-3P
     697805-06-4P 697805-07-5P
                                 697805-08-6P
                                               697805-09-7P
     697805-10-0P
                   697805-11-1P 697805-12-2P
                                                697805-13-3P
     697805-14-4P
                    697805-15-5P 697805-16-6P
                                                697805-17-7P
     697805-18-8P
                   697805-19-9P 697805-20-2P
                                                697805-21-3P
                   697805-23-5P 697805-24-6P
     697805-22-4P
                                                697805-25-7P
                                   697805-28-0P 697805-29-1P
     697805-26-8P
                   697805-27-9P
     697805-30-4P 697805-31-5P 697805-32-6P
                    697805-34-8P 697805-35-9P
     697805-33-7P
     697805-36-0P 697805-37-1P 697805-38-2P
     697805-39-3P 697805-40-6P
                                 697805-41-7P
     697805-42-8P 697805-43-9P 697805-44-0P
     697805-45-1P 697805-46-2P
                                 697805-47-3P 697805-48-4P
     697805-49-5P 697805-50-8P 697805-51-9P
     697805-52-0P 697805-53-1P 697805-54-2P
     697805-55-3P
                    697805-56-4P
                                                  697805-58-6P
                                   697805-57-5P
     697805-59-7P
                    697805-60-0P
                                   697805-61-1P
                                                  697805-62-2P
                                                                 697805-63-3P
     697805-64-4P
                    697805-65-5P 697805-66-6P
                                                697805-67-7P
     697805-68-8P 697805-69-9P
                                697805-70-2P 697805-71-3P
     697805-72-4P
                    697805-73-5P 697805-74-6P
                    697805-76-8P 697805-77-9P
     697805-75-7P
                                                697805-78-0P
     697805-79-1P 697805-80-4P 697805-81-5P
     697805-82-6P 697805-83-7P 697805-84-8P
     697805-85-9P 697805-86-0P 697805-87-1P
     697805-88-2P 697805-89-3P
                                 697805-90-6P
     697805-91-7P 697805-92-8P
                                 697805-93-9P
     697805-94-0P 697805-95-1P 697805-96-2P
     697805-97-3P 697805-98-4P 697805-99-5P
    697806-00-1P
                    697806-01-2P 697806-02-3P
    697806-03-4P 697806-04-5P 697806-05-6P
    697806-06-7P 697806-07-8P
                                                697806-09-0P
                                 697806-08-9P
    697806-10-3P
                    697806-11-4P
                                                  697806-13-6P
                                   697806-12-5P
                                                                 697806-15-8P
    697806-16-9P 697806-17-0P
                                 697806-18-1P
                                                697806-19-2P
    697806-20-5P
                    697806-21-6P
                                   697806-22-7P
    RL: RCT (Reactant); SPN (Synthetic preparation); PREP
     (Preparation); RACT (Reactant or reagent)
        (preparation of N-[4-(piperazin-1-yl)-phenyl]-2-oxazolidinone-5-carboxamide
       derivs. for therapeutic use as antibacterial agents)
ΙT
    RL: BSU (Biological study, unclassified); RCT (Reactant); PREP
     (Preparation); THU (Therapeutic use); PREP (Preparation);
```

Absolute stereochemistry.

RN

CN

NH\(^C\(^G2\) Q\(^\Hy\) Cb\(^G4\(^A\) @10 11 12 @13 14 19 20 @21

Remaining CA seferences

```
SACKEY 10/717237 06/05/2006
                                  Page 7
VAR G1=HY/13/10
VAR G2=O/S
VAR G3=HY/21
REP G4 = (0-4) A
VAR G5=C/N
REP G6 = (2-3) CH2
REP G7=(1-4) CH2
NODE ATTRIBUTES:
DEFAULT MLEVEL IS ATOM
        IS MCY AT
GGCAT
DEFAULT ECLEVEL IS LIMITED
ECOUNT IS E1 O AT
GRAPH ATTRIBUTES:
RING(S) ARE ISOLATED OR EMBEDDED
NUMBER OF NODES IS 25
STEREO ATTRIBUTES: NONE
L29
               SCR 1841
L31
            239 SEA FILE=REGISTRY SSS FUL L27 AND L29
L33
             35 SEA FILE=HCAPLUS ABB=ON L31
L34
             32 SEA FILE=HCAPLUS ABB=ON L33(L)PREP/RL
L36
             1 SEA FILE=HCAPLUS ABB=ON L21 AND L34
L37
             31 SEA FILE=HCAPLUS ABB=ON L34 NOT L36
=> d 137 bib abs hitind hitstr 1-31
L37 ANSWER 1 OF 31 HCAPLUS COPYRIGHT 2006 ACS on STN
AN
     2006:101053 HCAPLUS
DN
     144:192234
ΤI
     Preparation of oxazolidinone compounds and compositions for the treatment
     of bacterial infections
IN
     Cano, Montserrat; Palomer, Albert; Guglietta, Antonio
PA
     Ferrer Internacional, S. A., Spain
so
     PCT Int. Appl., 75 pp.
     CODEN: PIXXD2
DT
     Patent
     English
LA
FAN.CNT 1
     PATENT NO.
                        KIND
                                DATE
                                          APPLICATION NO.
                         ____
     WO 2006010756
                        A1
                                20060202
                                          WO 2005-EP53627
         W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH,
             CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD,
             GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KP, KR, KZ,
             LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA,
            NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK,
             SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU,
             ZA, ZM, ZW
         RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE,
             IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ,
             CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH,
            GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY,
            KG, KZ, MD, RU, TJ, TM
PRAI EP 2004-103657
                         Α
                                20040729
os
     CASREACT 144:192234; MARPAT 144:192234
GI
```

AΒ Oxazolidinones of formula I [R1-R4 = H, F, C1; A = (substituted) furanyl, (substituted) benzofuranyl; X = O, S, (substituted) NH, (substituted) CH2; Y = O, S, SO, SO2, NO, (substituted) NH, (substituted) CH2] are prepared The compds. are active against Gram-pos. and some Gram-neq. human and veterinary pathogens with a weak monoamine oxidase (MAO) inhibitory activity. They are useful for the treatment of bacterial infections. Pharmaceutical compns. containing I are described. Thus, II was prepared, and had MIC value of 0.50 µg/mL against S. aureus.

CC 28-6 (Heterocyclic Compounds (More Than One Hetero Atom)) Section cross-reference(s): 1, 63

IT 874819-75-7P 874819-77-9P 874819-80-4P 874819-82-6P 874819-84-8P 874819-85-9P 874819-91-7P 874820-25-4P RL: PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)

(preparation of oxazolidinones as antibacterial agents)

IT 874820-25-4P

RL: PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses) (preparation of oxazolidinones as antibacterial agents)

RN 874820-25-4 HCAPLUS

3-Furancarboxamide, N-[[(5S)-3-[3-fluoro-4-[4-[(phenylmethoxy)acetyl]-1-CN piperazinyl]phenyl]-2-oxo-5-oxazolidinyl]methyl]- (9CI) (CA INDEX NAME)

## RE.CNT 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

```
ANSWER 2 OF 31 HCAPLUS COPYRIGHT 2006 ACS on STN
L37
    2004:857593 HCAPLUS
ΑN
DN
     141:332221
    Preparation of N-aryl-2-oxazolidinone-5-carboxamides as antibacterials.
ΤI
    Harris, Christina Renee
IN
PA
    Pharmacia & Upjohn Company, USA
    PCT Int. Appl., 40 pp.
SO
    CODEN: PIXXD2
DT
    Patent
    English
LA
FAN.CNT 1
    PATENT NO.
                        KIND
                                         APPLICATION NO.
                               DATE
                                                                 DATE
     ______
                        ----
                               -----
                                          -----
    WO 2004087697
                               20041014
                                        WO 2004-IB943
PΙ
                        A1
                                                                 20040322
        W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH,
            CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD,
            GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC,
            LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI,
            NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY,
            TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
```

RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG US 2004204463 Α1 20041014 US 2004-795192 20040305 CA 2004-2520723 CA 2520723 AA 20041014 20040322 EP 2004-722352 EP 1615917 **A1** 20060118 20040322 AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, PL, SK

20060328

PRAI US 2003-459444P P 20030401 WO 2004-IB943 W 20040322

Α

OS MARPAT 141:332221

BR 2004009143

GI

BR 2004-9143

20040322

773128-19-1P

773128-20-4P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP

AB Title compds. [I; A = Q1-Q4; B = Q5, Q6; W = NHC(:X)R1, Het, YHet; X = O, S; Y = NH, O, S; Z = R5C.tplbond.C(CH2)rE; E = CH2, CO; R1 = H, NH2,(substituted) NHA, A, alkenyl, alkoxy, alkylthio, cycloalkyl(alkyl); A = alkyl; R2 = H, halo, alkyl; R4 = H, Me, F; R5 = H, (substituted) aryl, heteroaryl; m, n = 0-4; m+n = 2-5; p = 1-3; r = 0-6; Q7 = (CH2)n; Q8 = (CH2)m; Q9 = (CH2)p] were prepared Thus, 5-hexynoic acid was coupled to the corresponding piperazine derivative using diphenylphosphoryl azide and Hunig's base to give N-[[(5S)-3-[3-fluoro-4-(4-hex-5-ynoylpiperazin-1-yl)phenyl]-2oxooxazolidin-5-yl]methyl]acetamide. The latter showed a min. inhibitory concentration of 1 µg/mL against SPNE 9912. IC ICM C07D413-12 ICS C07D413-10; C07D263-20; A61K031-496; A61P031-04 CC 28-17 (Heterocyclic Compounds (More Than One Hetero Atom)) Section cross-reference(s): 1, 34 ΙT 773127-81-4P 773127-83-6P 773127-85-8P 773127-87-0P 773127-88-1P 773127-89-2P 773127-91-6P 773127-92-7P 773127-93-8P 773127-94-9P 773127-96-1P 773127-97-2P 773127-98-3P 773127-99-4P 773128-00-0P 773128-01-1P 773128-02-2P 773128-03-3P 773128-04-4P 773128-05-5P 773128-07-7P 773128-08-8P 773128-09-9P 773129-09-2P 773894-58-9P RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses) (claimed compound; preparation of aryloxazolidinonecarboxamides as antibacterials) IT 773128-10-2P 773128-11-3P 773128-12-4P 773128-13-5P 773128-14-6P RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses) (preparation of aryloxazolidinonecarboxamides as antibacterials) ΙT 773128-15-7P 773128-16-8P 773128-17-9P 773128-18-0P

773128-21-5P

(Preparation); RACT (Reactant or reagent) (preparation of aryloxazolidinonecarboxamides as antibacterials) 773127-81-4P 773127-87-0P 773127-88-1P IT 773127-89-2P 773127-91-6P 773127-92-7P 773127-93-8P 773127-94-9P 773127-96-1P 773127-99-4P 773128-00-0P 773128-01-1P 773128-02-2P 773128-04-4P 773128-05-5P 773128-07-7P 773128-08-8P 773128-09-9P 773129-09-2P 773894-58-9P RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses) (claimed compound; preparation of aryloxazolidinonecarboxamides as antibacterials) 773127-81-4 HCAPLUS RN Acetamide, N-[[(5S)-3-[4-[4-[6-[3-(aminomethyl)phenyl]-1-oxo-5-hexynyl]-1-CN piperazinyl]-3-fluorophenyl]-2-oxo-5-oxazolidinyl]methyl]- (9CI) INDEX NAME)

Absolute stereochemistry.

PAGE 1-A

SACKEY 10/717237 06/05/2006

RN 773127-87-0 HCAPLUS

CN Acetamide, N-[[(5S)-3-[3-fluoro-4-[4-[5-(4-hydroxyphenyl)-1-oxo-4-pentynyl]-1-piperazinyl]phenyl]-2-oxo-5-oxazolidinyl]methyl]- (9CI) (CFINDEX NAME)

Page 12

Absolute stereochemistry.

RN 773127-88-1 HCAPLUS

CN Acetamide, N-[[(5S)-3-[3-fluoro-4-[4-[5-(3-hydroxyphenyl)-1-oxo-4-pentynyl]-1-piperazinyl]phenyl]-2-oxo-5-oxazolidinyl]methyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 773127-89-2 HCAPLUS

CN Acetamide, N-[[(5S)-3-[4-[4-[5-[4-(aminomethyl)phenyl]-1-oxo-4-pentynyl]-1-

SACKEY 10/717237 06/05/2006 Page 13

piperazinyl]-3-fluorophenyl]-2-oxo-5-oxazolidinyl]methyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 773127-91-6 HCAPLUS

CN Acetamide, N-[[(5S)-3-[3-fluoro-4-[4-[6-(4-hydroxyphenyl)-1-oxo-5-hexynyl]-1-piperazinyl]phenyl]-2-oxo-5-oxazolidinyl]methyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A

PAGE 2-A

RN 773127-92-7 HCAPLUS

CN Acetamide, N-[[(5S)-3-[3-fluoro-4-[4-[6-(3-hydroxyphenyl)-1-oxo-5-hexynyl]-1-piperazinyl]phenyl]-2-oxo-5-oxazolidinyl]methyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A

PAGE 2-A

RN 773127-93-8 HCAPLUS

CN Acetamide, N-[[(5S)-3-[4-[4-[6-[4-(aminomethyl)phenyl]-1-oxo-5-hexynyl]-1-piperazinyl]-3-fluorophenyl]-2-oxo-5-oxazolidinyl]methyl]- (9CI) (CA

SACKEY 10/717237 06/05/2006

Page 15

INDEX NAME)

Absolute stereochemistry.

PAGE 1-A

PAGE 2-A

RN 773127-94-9 HCAPLUS

CN Acetamide, N-[[(5S)-3-[3-fluoro-4-[4-[7-(3-hydroxyphenyl)-1-oxo-6-heptynyl]-1-piperazinyl]phenyl]-2-oxo-5-oxazolidinyl]methyl]- (9CI) (CA INDEX NAME)

PAGE 2-A

RN 773127-96-1 HCAPLUS
CN Acetamide, N-[[(5S)-3-[3-fluoro-4-[4-[7-(4-hydroxyphenyl)-1-oxo-6-heptynyl]-1-piperazinyl]phenyl]-2-oxo-5-oxazolidinyl]methyl]- (9CI) (CA INDEX NAME)

PAGE 2-A

RN 773127-99-4 HCAPLUS

CN Acetamide, N-[[(5S)-3-[4-[4-[5-(4-aminophenyl)-1-oxo-4-pentynyl]-1-piperazinyl]-3-fluorophenyl]-2-oxo-5-oxazolidinyl]methyl]- (9CI) (CA INDEX NAME)

RN 773128-00-0 HCAPLUS

CN Acetamide, N-[[(5S)-3-[3-fluoro-4-[4-[6-[4-[(methylamino)methyl]phenyl]-1-oxo-5-hexynyl]-1-piperazinyl]phenyl]-2-oxo-5-oxazolidinyl]methyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A

PAGE 2-A

RN 773128-01-1 HCAPLUS

CN Acetamide, N-[[(5S)-3-[3-fluoro-4-[4-[6-[4-(1H-imidazol-1-ylmethyl)phenyl]-1-oxo-5-hexynyl]-1-piperazinyl]phenyl]-2-oxo-5-oxazolidinyl]methyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

$$C = C - (CH_2)_3$$

PAGE 1-B

NHAc

RN 773128-02-2 HCAPLUS

CN Acetamide, N-[[(5S)-3-[4-[4-[6-(4-acetylphenyl)-1-oxo-5-hexynyl]-1-piperazinyl]-3-fluorophenyl]-2-oxo-5-oxazolidinyl]methyl]- (9CI) (CA INDEX NAME)

PAGE 2-A

RN 773128-04-4 HCAPLUS

CN Acetamide, N-[[(5S)-3-[3-fluoro-4-[4-[6-[4-[(1E)-1-(hydroxyimino)ethyl]phenyl]-1-oxo-5-hexynyl]-1-piperazinyl]phenyl]-2-oxo-5-oxazolidinyl]methyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry as shown.

PAGE 2-A

RN 773128-05-5 HCAPLUS
CN Acetamide, N-[[(5S)-3-[4-[4-[6-(3-cyanophenyl)-1-oxo-5-hexynyl]-1-piperazinyl]-3-fluorophenyl]-2-oxo-5-oxazolidinyl]methyl]- (9CI) (CA INDEX NAME)

PAGE 2-A

RN 773128-07-7 HCAPLUS

CN L-Phenylalanine, 4-[6-[4-[4-[(5S)-5-[(acetylamino)methyl]-2-oxo-3-oxazolidinyl]-2-fluorophenyl]-1-piperazinyl]-6-oxo-1-hexynyl]-, mono(trifluoroacetate) (9CI) (CA INDEX NAME)

CM 1

CRN 773128-06-6 CMF C31 H36 F N5 O6

CM 2

CRN 76-05-1 CMF C2 H F3 O2

RN 773128-08-8 HCAPLUS

CN Acetamide, N-[[(5S)-3-[4-[4-[6-[3-(aminomethyl)phenyl]-1-oxo-5-hexynyl]-1-piperazinyl]-2,3,5-trifluorophenyl]-2-oxo-5-oxazolidinyl]methyl]- (9CI) (CA INDEX NAME)

PAGE 2-A

RN 773128-09-9 HCAPLUS

CN Acetamide, N-[[(5S)-3-[4-[4-[6-[4-(aminomethyl)phenyl]-1-oxo-5-hexynyl]-1-piperazinyl]-2,3,5-trifluorophenyl]-2-oxo-5-oxazolidinyl]methyl]- (9CI) (CA INDEX NAME)

PAGE 2-A

RN 773129-09-2 HCAPLUS

CN Acetamide, N-[[(5S)-3-[4-[4-[7-[4-(aminomethyl)phenyl]-1-oxo-6-heptynyl]-1-piperazinyl]-3-fluorophenyl]-2-oxo-5-oxazolidinyl]methyl]- (9CI) (CA INDEX NAME)

PAGE 2-A

RN773894-58-9 HCAPLUS CN

Acetamide, N-[[(5S)-3-[4-[4-[6-[4-[(Z)-amino(hydroxyimino)methyl]phenyl]-1-oxo-5-hexynyl]-1-piperazinyl]-3-fluorophenyl]-2-oxo-5-oxazolidinyl]methyl]-, monohydrochloride (9CI) (CA INDEX NAME)

PAGE 2-A

#### HCl

IT 773128-12-4P 773128-13-5P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of aryloxazolidinonecarboxamides as antibacterials)

RN 773128-12-4 HCAPLUS

CN Acetamide, N-[[(5S)-3-[3-fluoro-4-[4-[6-[4-[(1E)-1-(hydroxyimino)ethyl]phenyl]-1-oxo-5-hexynyl]-1-piperazinyl]phenyl]-2-oxo-5-oxazolidinyl]methyl]-, monohydrochloride (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry as shown.

#### PAGE 2-A

#### HCl

RN 773128-13-5 HCAPLUS
CN Acetamide, N-[[(5S)-3-[4-[4-[5-[3-(aminomethyl)phenyl]-1-oxo-4-pentynyl]-1-piperazinyl]-3-fluorophenyl]-2-oxo-5-oxazolidinyl]methyl]- (9CI) (CA

INDEX NAME)

IT 773128-15-7P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation of aryloxazolidinonecarboxamides as antibacterials)

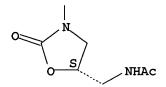
RN 773128-15-7 HCAPLUS

CN Carbamic acid, [[3-[6-[4-[4-[(5S)-5-[(acetylamino)methyl]-2-oxo-3-oxazolidinyl]-2-fluorophenyl]-1-piperazinyl]-6-oxo-1-hexynyl]phenyl]methyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A

PAGE 2-A



## RE.CNT 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

L37 ANSWER 3 OF 31 HCAPLUS COPYRIGHT 2006 ACS on STN

AN 2004:182853 HCAPLUS

DN 140:217664

TI Preparation of piperazinophenyl-substituted oxazolidinones as antibacterial agents

IN Agarwal, Shiv Kumar; Guha, Mrinal Kanti; Pandey, Surendrakumar Satyanarayan; Samuel, Matte Marianna

PA Orchid Chemicals & Pharmaceuticals Ltd, India

SO PCT Int. Appl., 97 pp.

CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 1

GI

FAN.	CNT I															
	PATENT	NO.		KIND DATE				1				DATE				
ΡI	WO 2004	018439	A1	2	0040	304	,		 003-:		20030821					
	W:	AE, A	AG, AL,	AM,	AT,	AU,	AZ,	BA,	BB,	BG,	BR,	BY,	BZ,	CA,	CH,	CN,
		co, c	CR, CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	ES,	FI,	GB,	GD,	GE,	GH,
			IR, HU,													
		LS, I	LT, LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	MZ,	ΝI,	NO,	NZ,	OM,
			PH, PL,													
			TT, TZ,													
	RW:	GH, C	SM, KE,	LS,	MW,	MZ,	SD,	SL,	SZ,	TZ,	ŪĠ,	ZM,	ZW,	AM,	ΑZ,	BY,
		KG, F	(Z, MD,	RU,	ТJ,	TM,	AT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,	EE,	ES,
		FI, E	R, GB,	GR,	HU,	ΙE,	IT,	LU,	MC,	NL,	PT,	RO,	SE,	SI,	SK,	TR,
		BF, E	BJ, CF,	CG,	CI,	CM,	GA,	GN,	GQ,	GW,	ML,	MR,	NE,	SN,	TD,	TG
	CA 2513	AA	_							20030821						
	AU 2003	253141	L .	A1 20040311				1	AU 2	003-2	25314		20030821			
	EP 1578	734		A1. 20050928				]	EP 2	003-	7925		20030821			
	R:		BE, CH,													PT,
		IE, S	SI, LT,	LV,	FI,	RO,	MK,	CY,	AL,	TR,	BG,	CZ,	EE,	HU,	SK	
	US 2005	070526	5	A1	2	0050	331	US 2003-469648						20	0030	903
PRAI	IN 2002	-MA618	3	A	2	0020	822									
	WO 2003	-IB345	9	W	2	0030	821									
os	MARPAT	140:21	.7664													

$$R^{2}$$
 $R^{2}$ 
 $R^{2$ 

AB The present invention provides piperazinophenyl-substituted oxazolidinones (shown as I; variables defined below; all examples are oxazolidinones, e.g. II), their derivs., analogs, tautomeric forms, stereoisomers, polymorphs, hydrates, solvates, pharmaceutically acceptable salts and pharmaceutically acceptable compns. containing them, methods for their preparation,

II

and their use against infections, particularly bacterial infections. Min. inhibitory concns. were obtained for 12 examples of I for Staphylococcus aureus, Enterococcus faecalis, Moraxella catarrhalis and Staphylococcus epidermidis. Characterization data and/or preparative details are given for 51 examples of I and 39 intermediates. For example, II was prepared in 81% yield from N-[[(S)-3-[3-fluoro-4-[4-(thiophen-3-ylcarbonyl)piperazin-1yl]phenyl]-2-oxooxazolidin-5-yl]methyl]acetamide using Lawesson's reagent; the reactant was prepared in 10 steps starting with substitution of 3,4-difluoronitrobenzene by piperazine (98%) and followed by N-protection with Boc, reduction to amine (93%), carbamate formation with benzyl chloroformate, cyclization with (R)-glycidyl butyrate to give [(R)-3-[3-fluoro-4-[4-(tert-butoxycarbonyl)piperazin-1-yl]phenyl]-2oxooxazolidin-5-yl]methanol, conversion to mesylate, conversion to azide, reduction/acetylation, deprotection, and acylation with thiophene-3-carboxylic acid (54%). For I: Z1 and Z2 = O or S; R1 = halogen, azido, nitro, cyano, XR6 (X = O or S; R6 = H, formyl, (un)substituted (C1-C6)alkyl, cycloalkyl, aryl, aralkyl, acyl, thioacyl, heterocyclyl, heteroaryl, alkylsulfonyl, arylsulfonyl, aralkylsulfonyl), N(R7aR7b) (R7a and R7b = H, formyl, (un) substituted (C1-C6) alkyl, aryl, aralkyl, heteroaryl, heteroaralkyl or an amino acid residue which is attached through acid moiety, or R7a and R7b together with N = mono or bicyclic (un)saturated ring system which may contain  $\geq 1$  O, S or N), or -NHC(:Y)R8 (Y = O or S; R8 is H, (un) substituted (C1-C6) alkyl, (C1-C6) alkoxy, aryl, (C3-C6) cycloalkyl, amino, monoalkylamino, dialkylamino, cycloalkylamino, arylamino, aroylamino, alkylcarbonylamino, arylcarbonylamino, heteroaryl, heterocyclyl, heteroaralkyl, heteroaroylamino) or R1 is NHS(0)p(C1-C4)alkyl, -NHS(0)p(C1-C4)aryl or -NHS(0)p(C1-C4)heteroaryl (p = 0-2). R2 and R3 = H, halogen, hydroxy, alkyl, alkoxy; R4 and R5 = H, cyano, nitro, amino, halogen, hydroxy, (un) substituted (C1-C6) alkyl, haloalkyl, (C1-C6) alkoxy, (C1-C6) alkylthio, (C3-C6) cycloalkyl or either of R4 or R5 = oxo or thioxo; n = 0-2; when Z2 = S, A = NHR9 or

IC

CC

IT

(un) substituted cycloalkyl, aryl, 5-7 membered heteroaryl, heterocyclyl (attached through C atom), heteroarylalkenyl, heterocyclylalkenyl; wherein R9 = H or (un)substituted alkyl, aryl, alkoxy, alkenyl, cycloalkyl, heteroaryl or heterocyclyl; when Z2 = O, A = NHR9, where R9 = Ph substituted by nitro; (un) substituted alkoxy, alkenyl, cycloalkyl, heteroaryl or heterocyclyl group. M = 0-2; n = 0-4, with a proviso that when n is 0, R9 does not = H or alkyl. ICM C07D263-22 ICS C07D413-12; A61K031-44; A61P031-04 28-17 (Heterocyclic Compounds (More Than One Hetero Atom)) Section cross-reference(s): 1, 10, 63 154590-33-7P, 3-Fluoro-4-(piperazin-1-yl)nitrobenzene 154590-34-8P, 3-Fluoro-4-[4-(tert-butoxycarbonyl)piperazin-1-yl]nitrobenzene 154590-35-9P, 3-Fluoro-4-[4-(tert-butoxycarbonyl)piperazin-1-yl]aniline 154590-36-0P, Benzyl [3-fluoro-4-[4-(tert-butoxycarbonyl)piperazin-1-154590-62-2P, [(R)-3-[3-Fluoro-4-[4-(tertyl]phenyl]carbamate butoxycarbonyl)piperazin-1-yl]phenyl]-2-oxooxazolidin-5-yl]methanol 154590-63-3P, [(R)-3-[3-Fluoro-4-(4-tert-butoxycarbonylpiperazin-1yl)phenyl]-2-oxooxazolidin-5-yl]methyl mesylate 154590-64-4P, N-[[(R)-3-[3-Fluoro-4-(4-tert-butoxycarbonylpiperazin-1-yl)phenyl]-2oxooxazolidin-5-yl]methyl] azide 154590-65-5P, N-[[(S)-3-[3-Fluoro-4-(4tert-butoxycarbonylpiperazin-1-yl)phenyl]-2-oxooxazolidin-5yl]methyl]acetamide 154590-66-6P, N-[[(S)-3-[3-Fluoro-4-(piperazin-1yl)phenyl]-2-oxooxazolidin-5-yl]methyl]acetamide 250158-68-0P, N-[[(S)-3-[3-Fluoro-4-[4-[(3-methylisoxazol-5-yl)carbonyl]piperazin-1yl]phenyl]-2-oxooxazolidin-5-yl]methyl]acetamide 250158-79-3P, N-[[(S)-3-[3-Fluoro-4-[4-[(thien-2-yl)carbonyl]piperazin-1-yl]phenyl]-2oxooxazolidin-5-yl]methyl]acetamide 392659-28-8P, N-[[(S)-3-[3-Fluoro-4-[4-[(5-nitrofuran-2-yl)carbonyl]piperazin-1-yl]phenyl]-2-oxooxazolidin-5yl]methyl]acetamide 392659-36-8P, N-{[(S)-3-[3-Fluoro-4-[4-[(thien-2-yl)acetyl]piperazin-1-yl]phenyl]-2-oxooxazolidin-5yl]methyl]acetamide 665011-43-8P, N-[[(S)-3-[3-Fluoro-4-[4-(thiophen-3ylcarbonyl)piperazin-1-yl]phenyl]-2-oxooxazolidin-5-yl]methyl]acetamide 665011-44-9P, N-[((S)-3-[3-Fluoro-4-[4-[(5-methylthien-2yl)carbonyl]piperazin-1-yl]phenyl]-2-oxooxazolidin-5-yl]methyl]acetamide 665011-45-0P, N-[[(S)-3-[3-Fluoro-4-[4-[(5-chlorothien-2yl)carbonyl]piperazin-1-yl]phenyl]-2-oxooxazolidin-5-yl]methyl]acetamide 665011-46-1P, N-[{(S)-3-[3-Fluoro-4-[4-[(3-methylthien-2yl)carbonyl]piperazin-1-yl]phenyl]-2-oxooxazolidin-5-yl]methyl]acetamide 665011-47-2P, N-[[(S)-3-[3-Fluoro-4-[4-[(2-chloropyridin-3yl)carbonyl]piperazin-1-yl]phenyl]-2-oxooxazolidin-5-yl]methyl]acetamide 665011-48-3P, N-[[(S)-3-[3-Fluoro-4-[4-[(3-chlorothien-2yl)carbonyl]piperazin-1-yl]phenyl]-2-oxooxazolidin-5-yl]methyl]acetamide 665011-49-4P, N-[[(S)-3-[3-Fluoro-4-[4-[(5-bromothien-2yl)carbonyl]piperazin-1-yl]phenyl]-2-oxooxazolidin-5-yl]methyl]acetamide 665011-50-7P, N-[[(S)-3-[3-Fluoro-4-[4-[(pyrazin-2-yl)carbonyl]piperazin-1yl]phenyl]-2-oxooxazolidin-5-yl]methyl]acetamide 665011-51-8P, N-[[(S)-3-[3-Fluoro-4-[4-[(6-chloropyridin-3-yl)carbonyl]piperazin-1-[yl]phenyl]-2-oxooxazolidin-5-yl]methyl]acetamide 665011-52-9P, N-[[(S)-3-[3-Fluoro-4-[4-[(5-methylisoxazol-3-yl)carbonyl]piperazin-1yl]phenyl]-2-oxooxazolidin-5-yl]methyl]acetamide 665011-53-0P, N-[[(S)-3-[3-Fluoro-4-[4-[(5-methylpyrazin-2-yl)carbonyl]piperazin-1-yl)carbonyl]piperazin-1-ylonylyl]phenyl]-2-oxooxazolidin-5-yl]methyl]acetamide 665011-54-1P, N-[[(S)-3-[3-Fluoro-4-[4-[(imidazol-2-yl)carbonyl]piperazin-1-yl]phenyl]-2-665011-55-2P, N-[[(S)-3-[3-Fluoro-4oxooxazolidin-5-yl]methyl]acetamide [4-[(quinolin-2-yl)carbonyl]piperazin-1-yl]phenyl]-2-oxooxazolidin-5yl]methyl]acetamide 665011-56-3P, N-[[(S)-3-[3-Fluoro-4-[4-[(quinolin-3yl)carbonyl]piperazin-1-yl]phenyl]-2-oxooxazolidin-5-yl]methyl]acetamide

665011-57-4P, N-[[(S)-3-[3-Fluoro-4-[4-(cyclopropylcarbonyl)piperazin-1-

yl]phenyl]-2-oxooxazolidin-5-yl]methyl]acetamide 665011-58-5P,

```
N-[[(S)-3-[3-Fluoro-4-[4-(benzoyl)piperazin-1-yl]phenyl]-2-oxooxazolidin-5-
     y1]methyl]acetamide 665011-59-6P, N-[[(S)-3-[3-Fluoro-4-[4-
     (cyclobutylcarbonyl)piperazin-1-yl]phenyl]-2-oxooxazolidin-5-
                          665011-60-9P, N-[[(S)-3-[3-Fluoro-4-[4-
     yl]methyl]acetamide
     (cyclopentylcarbonyl)piperazin-1-yl]phenyl]-2-oxooxazolidin-5-
                           665011-61-0P, N-[[(S)-3-[3-Fluoro-4-[4-[[(S)-N-tert-
     yl]methyl]acetamide
     butoxycarbonylpyrrolidin-2-yl]carbonyl]piperazin-1-yl]phenyl]-2-
     oxooxazolidin-5-yl]methyl]acetamide
                                          665011-62-1P, N-[[(S)-3-[3-Fluoro-4-
     [4-[[[(tert-butoxy)carbonyl]amino]acetyl]piperazin-1-yl]phenyl]-2-
     oxooxazolidin-5-yl]methyl]acetamide
                                          665011-63-2P, N-[[(S)-3-[3-Fluoro-4-
     [4-[(N-tert-butoxycarbonylpyrrolidin-2-yl)thiocarbonyl]piperazin-1-
     yl]phenyl]-2-oxooxazolidin-5-yl]methyl]thioacetamide
                                                            665011-64-3P,
     N-[[(S)-3-[3-Fluoro-4-[4-[[(tert-butoxycarbonyl)amino]thioacetyl]piperazin-
     1-yl]phenyl]-2-oxooxazolidin-5-yl]methyl]thioacetamide
                                                              665011-65-4P,
     N-[[(R)-3-[3-Fluoro-4-[4-[(5-nitrofuran-2-yl)thiocarbonyl]piperazin-1-
     yl]phenyl]-2-oxooxazolidin-5-yl]methyl] azide
                                                     665011-66-5P,
     N-[[(R)-3-[3-Fluoro-4-[4-[(5-nitrofuran-2-yl)carbonyl]piperazin-1-
     yl]phenyl]-2-oxooxazolidin-5-yl]methyl] azide
                                                     665011-69-8P,
     N-[[(S)-3-[3-Fluoro-4-[4-[[N-(tert-butoxycarbonyl)amino]thioacetyl]piperaz
     in-1-yl]phenyl]-2-oxooxazolidin-5-yl]methyl]acetamide
                                                             665011-70-1P,
     N-[[(R)-3-[3-Fluoro-4-[4-[[N-(tert-butoxycarbonyl)amino]acetyl]piperazin-1-
     yl]phenyl]-2-oxooxazolidin-5-yl]methyl] azide
                                                     665011-71-2P,
     N-[[(R)-3-[3-Fluoro-4-[4-[[N-(tert-butoxycarbonyl)amino]thioacetyl]piperaz
     in-1-yl]phenyl]-2-oxooxazolidin-5-yl]methyl] azide
     RL: RCT (Reactant); SPN (Synthetic preparation); PREP
     (Preparation); RACT (Reactant or reagent)
        (preparation of piperazinophenyl-substituted oxazolidinones as antibacterial
IT
     392659-36-8P, N-[[(S)-3-[3-Fluoro-4-[4-[(thien-2-
     yl)acetyl]piperazin-1-yl]phenyl]-2-oxooxazolidin-5-yl]methyl]acetamide
     RL: RCT (Reactant); SPN (Synthetic preparation); PREP
     (Preparation); RACT (Reactant or reagent)
        (preparation of piperazinophenyl-substituted oxazolidinones as antibacterial
        agents)
RN
     392659-36-8 HCAPLUS
CN
     Acetamide, N-[(5S)-3-[3-fluoro-4-[4-(2-thienylacetyl)-1-
     piperazinyl]phenyl]-2-oxo-5-oxazolidinyl]methyl]- (9CI) (CA INDEX NAME)
```

RE.CNT 13 THERE ARE 13 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L37 ANSWER 4 OF 31 HCAPLUS COPYRIGHT 2006 ACS on STN

AN 2004:20492 HCAPLUS

DN 140:94033

TI Preparation of glycoloyl-substituted oxazolidinone difluorothioacetamide derivatives as antibacterial agents

IN Hester, Jackson B., Jr.; Adams, Wade J.; Stevens, Jeffrey C.; Scott, Carole; Gordeev, Mikhail F.; Singh, Upinder

PA Pharmacia & Upjohn Company, USA

SO PCT Int. Appl., 42 pp.

CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 1

FAN.	PATENT NO.					KIND DATE					ICAT:	DATE					
PI	WO 2004002479											20030616					
		AE,															
	w :	•	•	•	•		-							-		-	-
			CR,														
		•	HR,		•		•	•	•	•	•	•			-	-	
		•	LT,	•	•	•	•	•	•	•	•	•	-			•	
		PL,	PT,	RO,	RU,	SC,	SD,	SE,	SG,	SK,	SL,	ТJ,	TM,	TN,	TR,	TT,	TZ,
		UA,	UG,	US,	UΖ,	VC,	VN,	YU,	ZA,	ZM,	ZW						
	RW	: GH,	GM,	KE,	LS,	MW,	MZ,	SD,	SL,	SZ,	TZ,	ŬĠ,	ZM,	ZW,	AM,	AZ,	BY,
		KG,	KZ,	MD,	RU,	TJ,	TM,	AT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,	EE,	ES,
			FR,	•				-	-	-							
		•	ВJ,		•		•				•						
	CA 249		-	-					•	•	-	-	-	-	-	-	
	AU 200							0119									
	US 200												20030616				
	EP 151	9722			A1		2005	0406		EP 2	003	7313:	29		20	0030	516
	R:	ΑT,	BE,	CH,	DE,	DK,	ES,	FR,	GB,	GR,	IT,	LI,	LU,	NL,	SE,	MC,	PT,
		ΙE,	SI,	LT,	LV,	FI,	RO,	MK,	CY,	AL,	TR,	BG,	CZ,	EE,	ΗU,	SK	
	JP 200	55356	37		T2		2005	1124		JP 2	004-	5175	70		20	0030	516
PRAI	US 200	2-392	716P		P		2002	0628									
	WO 200																
os	MARPAT																
GI	FERREAL	140.	J = U J .	•													
GI																	

AB The present invention describes difluorothioacetamide oxazolidinones, many with a glycoloylpiperazine substituent, (shown as I; X is N or CH; R2 and

```
R3 = H or F; R1 is H, -CH2phenyl, or -C(0)C1-4alkyl; e.g. II) as novel
     antibacterial agents (no data), and antimicrobial combination therapies
     for combating infective diseases caused by gram-pos. and gram-neg.
     bacteria. Although the methods of preparation are not claimed, 9 example
     prepns. are included. For example, II was prepared in 5 steps starting from
     difluoroacetic acid and 3,3-diphenyl-1-propanol and involving
     intermediates O-(3,3-diphenylpropyl) difluoroethanethioate, tert-Bu
     4-[4-[(5S)-5-[(2,2-difluoroethanethioyl)amino]methyl]-2-oxo-1,3-
     oxazolidin-3-yl]-2,6-difluorophenyl]piperazine-1-carboxylate,
     N-[[(5S)-3-[3,5-difluoro-4-(piperazin-1-yl)phenyl]-2-oxo-1,3-oxazolidin-5-
     yl]methyl]-2,2-difluoroethanethioamide trifluoroacetate and
     2-[4-[4-[(5S)-5-[[(2,2-difluoroethanethioyl)amino]methyl]-2-oxo-1,3-
     oxazolidin-3-yl]-2,6-difluorophenyl]piperazin-1-yl]-2-oxoethyl acetate.
     ICM A61K031-42
IC
     ICS C07D263-20; A61P031-00
     28-6 (Heterocyclic Compounds (More Than One Hetero Atom))
CC
     Section cross-reference(s): 1, 63
ΙT
     640772-81-2P, 2,2-Difluoro-N-[[(5S)-3-[3,5-difluoro-4-(4-
     glycoloylpiperazin-1-yl)phenyl]-2-oxo-1,3-oxazolidin-5-
     yl]methyl]ethanethioamide
                                 640772-90-3P, 2,2-Difluoro-N-[[(5S)-3-[4-(4-
     glycoloylpiperazin-1-yl)phenyl]-2-oxo-1,3-oxazolidin-5-
     yl]methyl]ethanethioamide 640772-92-5P, N-[[(5S)-3-[4-[4-
     [(Benzyloxy)acetyl]piperazin-1-yl]phenyl]-2-oxo-1,3-oxazolidin-5-
     yl]methyl]-2,2-difluoroethanethioamide
                                             640772-94-7P,
     (5S)-5-[[(2,2-Difluoro-1-sulfinylethyl)amino]methyl]-3-[3-fluoro-4-(4-
     glycoloylpiperazin-1-yl)phenyl]-1,3-oxazolidin-2-one
                                                            640772-96-9P,
     Pyridinium 2-[4-[4-[(5S)-5-[[(2,2-Difluoroethanethioyl)amino]methyl]-2-oxo-
     1,3-oxazolidin-3-yl]-2-fluorophenyl]piperazin-1-yl]-2-oxoethyl sulfate
     640772-97-0P, 2,2-Difluoro-N-[[(5S)-3-[3-fluoro-4-(1-qlycoloylpiperidin-4-
     yl)phenyl]-2-oxo-1,3-oxazolidin-5-yl]methyl]ethanethioamide
     640773-04-2P, 2,2-Difluoro-N-[[(5S)-3-[4-(1-qlycoloylpiperidin-4-
     yl)phenyl]-2-oxo-1,3-oxazolidin-5-yl]methyl]ethanethioamide
     RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU
     (Therapeutic use); BIOL (Biological study); PREP (Preparation);
     USES (Uses)
        (drug candidate; preparation of glycoloyl-substituted oxazolidinone
        difluorothioacetamide derivs. as antibacterial agents)
IT
     570390-86-2P, O-(3,3-Diphenylpropyl) difluoroethanethioate
                                                                  640772-82-3P,
     tert-Butyl 4-[4-[(5S)-5-[[(2,2-difluoroethanethioyl)amino]methyl]-2-oxo-
     1,3-oxazolidin-3-yl]-2,6-difluorophenyl]piperazine-1-carboxylate
     640772-84-5P, N-[[(5S)-3-[3,5-Difluoro-4-(piperazin-1-yl)phenyl]-2-oxo-1,3-
     oxazolidin-5-yl]methyl]-2,2-difluoroethanethioamide mono(trifluoroacetate)
     640772-85-6P, 2-[4-[4-[(5S)-5-[[(2,2-Difluoroethanethioyl)amino]methyl]-2-
     oxo-1,3-oxazolidin-3-yl]-2,6-difluorophenyl]piperazin-1-yl]-2-oxoethyl
               640772-87-8P, Benzyl 4-[4-[(5S)-5-[[(difluoroacetyl)amino]methyl
     ]-2-oxo-1,3-oxazolidin-3-yl]-2-fluorophenyl]piperazine-1-carboxylate
     640772-88-9P, 2,2-Difluoro-N-[[(5S)-3-[3-fluoro-4-(piperazin-1-yl)phenyl]-
     2-oxo-1,3-oxazolidin-5-yl]methyl]acetamide
                                                  640772-89-0P,
     2,2-Difluoro-N-[[(5S)-3-[3-fluoro-4-(piperazin-1-yl)phenyl]-2-oxo-1,3-
     oxazolidin-5-yl]methyl]ethanethioamide
                                            640772-98-1P,
     (5S) -5-[[(Benzylidene)amino]methyl]-3-[3-fluoro-4-(piperidin-4-yl)phenyl]-
     1,3-oxazolidin-2-one
                            640772-99-2P, (5S)-5-[[(Benzylidene)amino]methyl]-3-
     [4-[1-[(benzyloxy)acetyl]piperidin-4-yl]-3-fluorophenyl]-1,3-oxazolidin-2-
          640773-00-8P, (5S)-5-(Aminomethyl)-3-[4-[1-
     [(benzyloxy)acetyl]piperidin-4-yl]-3-fluorophenyl]-1,3-oxazolidin-2-one
     640773-01-9P, tert-Butyl [[(5S)-3-[4-[1-
     [(benzyloxy)acetyl]piperidin-4-yl]-3-fluorophenyl]-2-oxo-1,3-oxazolidin-5-
                          640773-02-0P, tert-Butyl [[(5S)-3-[3-fluoro-4-(1-
    yl]methyl]carbamate
    glycoloylpiperidin-4-yl)phenyl]-2-oxo-1,3-oxazolidin-5-yl]methyl]carbamate
    640773-03-1P, (5S)-5-(Aminomethyl)-3-[3-fluoro-4-(1-glycoloylpiperidin-4-
```

yl)phenyl]-1,3-oxazolidin-2-one hydrochloride 640773-06-4P, (5S) -5-(Aminomethyl) -3-[3-fluoro-4-(piperidin-4-yl)phenyl] -1,3-oxazolidin-2-one RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent) (preparation of glycoloyl-substituted oxazolidinone difluorothioacetamide derivs. as antibacterial agents) ΙT 640772-92-5P, N-[[(5S)-3-[4-[4-[(Benzyloxy)acetyl]piperazin-1yl]phenyl]-2-oxo-1,3-oxazolidin-5-yl]methyl]-2,2-difluoroethanethioamide RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses) (drug candidate; preparation of glycoloyl-substituted oxazolidinone difluorothioacetamide derivs. as antibacterial agents) RN640772-92-5 HCAPLUS CN Ethanethioamide, 2,2-difluoro-N-[[(5S)-2-oxo-3-[4-[4-[(phenylmethoxy)acetyl]-1-piperazinyl]phenyl]-5-oxazolidinyl]methyl]-(CA INDEX NAME)

Absolute stereochemistry.

Absolute stereochemistry.

## RE.CNT 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

```
L37 ANSWER 5 OF 31 HCAPLUS COPYRIGHT 2006 ACS on STN
AN
     2003:892759 HCAPLUS
     139:381743
DN
ΤI
     Preparation of oxazolidinone amino acid derivatives as antibacterial
     agents
     Agarwal, Shiv Kumar; Pandey, Surendrakumar Satyanarayan
IN
PΑ
     Orchid Chemicals & Pharmaceuticals Ltd., India
so
     PCT Int. Appl., 53 pp.
     CODEN: PIXXD2
DT
     Patent
LΑ
     English
FAN.CNT 1
     PATENT NO.
                       KIND
                               DATE
                                          APPLICATION NO.
                         _ _ _ _
                               -----
                                           -----
PI
    WO 2003093247
                         A2
                               20031113
                                           WO 2003-IB1571
     WO 2003093247
                        A3
                               20031224
        W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
            CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,
            GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,
            LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM,
            PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT,
            TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
        RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY,
            KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES,
            FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR,
            BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
                             20031117
    AU 2003224345
                         A1
                                         AU 2003-224345
                                                                  20030425
PRAI IN 2002-MA329
                         Α
                               20020430
    WO 2003-IB1571
                         W
                               20030425
os
    MARPAT 139:381743
GI
```

Ι

AB The invention provides novel oxazolidinone derivs. of I [X is 0, S, S0, S02, or NR7, where R7 is H, OH, alkyl, alkanoyl, etc.; Y is (CH2)0-2; Z is O or S; R1 is H, alkyl, aryl, or cycloalkyl; R2 is an amino acid residue; R3, R4 are H or halo; R5, R6 are H, cyano, nitro, amino, oxo, thioxo, hydroxy, alkyl, alkoxy, alkylthio, or cycloalkyl] and their derivs., analogs, tautomeric forms, stereoisomers, polymorphs, and pharmaceutically-acceptable salts as new antibacterial agents. Thus, (S)-N-[[3-(3-fluoro-4-morpholinophenyl)-2-oxooxazolidin-5-yl]methyl]-2-aminopropionamide hydrochloride was prepared via acylation of the 5-(aminomethyl)-2-oxazolidinone derivative and showed MIC > 8 μg/mL against S. Aureus or E. Faecalis.

IC ICM C07D263-00

CC 34-2 (Amino Acids, Peptides, and Proteins)

Section cross-reference(s): 10

IT 221201-21-4P 221201-25-8P 221201-56-5P 623169-81-3P 623169-83-5P 623169-84-6P 623169-86-8P 623169-88-0P 623169-89-1P 623169-90-4P

623169-91-5P 623169-92-6P 623169-93-7P **623169-94-8P** 

623169-95-9P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP

(Preparation); RACT (Reactant or reagent)

(preparation of oxazolidinone amino acid derivs. as antibacterial agents)

IT 623169-94-8P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP

(Preparation); RACT (Reactant or reagent)

(preparation of oxazolidinone amino acid derivs. as antibacterial agents)

RN 623169-94-8 HCAPLUS

CN Carbamic acid, [2-[[[(5S)-3-[3-fluoro-4-[4-[(phenylmethoxy)acetyl]-1piperazinyl]phenyl]-2-oxo-5-oxazolidinyl]methyl]amino]-1-methyl-2oxoethyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

BR 2003008837

WO 2003-IN81

PRAI IN 2002-MU310

Α

Α

W

```
L37
    ANSWER 6 OF 31 HCAPLUS COPYRIGHT 2006 ACS on STN
AN
     2003:796700 HCAPLUS
DN
     139:307798
ΤI
     Preparation of 3-(4-piperazinophenyl) substituted oxazolidinones as novel
     antiinfective compounds and pharmaceutical compositions containing them
IN
     Lohray, Braj Bhushan; Lohray, Vidya Bhushan; Srivastava, Brijesh Kumar
PA
     Cadila Healthcare Limited, India
SO
     PCT Int. Appl., 78 pp.
     CODEN: PIXXD2
     Patent
DT
LA
    English
FAN.CNT 1
    PATENT NO.
                         KIND
                                DATE
                                           APPLICATION NO.
                         ----
                                -----
                                           ------
PΙ
    WO 2003082864
                         A2
                                20031009
                                            WO 2003-IN81
                                                                   20030326
    WO 2003082864
                         А3
                                20031113
            AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
            CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,
            GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,
            LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH,
            PL, PT, RO, RU, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA,
            UG, US, UZ, VN, YU, ZA, ZM, ZW
        RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY,
            KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES,
             FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR,
            BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
    CA 2478502
                          AA
                                20031009
                                           CA 2003-2478502
                                                                   20030326
    AU 2003231920
                          A1
                                20031013
                                            AU 2003-231920
                                                                   20030326
    EP 1495021
                         A2
                                20050112
                                           EP 2003-745394
                                                                   20030326
           AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
            IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK
```

BR 2003-8837

20030326

20050201

20020401

20030326

GI

```
* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *
```

```
The title compds. [I; Ar = (un) substituted Ph, 5-6 membered heteroaryl;
AB
     R1, R2 = H, halo, alkyl, etc.; Y = II-IV (wherein R3, R4 = H, alkyl, halo,
     etc.; X = O, S, NR5; R5 = H, alkyl, aryl; A = (un) substituted (un) saturated
     single or fused ring optionally containing one or more heteroatoms selected
     from N, S, O; Z = H, alkyl, CN, etc.); W = OH, N3, NH2, NCS, etc.], useful
     for treating bacterial infections, psoriasis, arthritis, were prepared
     Thus, amidation of (S)-N-({3-[3-fluoro-4-(N-piperazinyl)phenyl]-2-oxo-5-
     oxazolidinyl}methyl)acetamide with 3-(2-thienyl)acrylic acid afforded 53%
            The compds. I inhibited the growth of bacteria such as
     Staphylococcus aureus, Staphylococcus epidermidis and Enterococcus
     faecalis with MIC's in a range of about 0.25 µg/mL to about 64
     μg/mL. Pharmaceutical composition comprising the compound I is claimed.
IC
     ICM C07D413-12
     ICS
         C07D263-20; A61K031-422; A61K031-497; A61P031-04; A61P017-06;
          A61P031-00
CC
     28-17 (Heterocyclic Compounds (More Than One Hetero Atom))
     Section cross-reference(s): 1, 10, 63
IT
     612054-71-4P
                    612054-72-5P
                                   612054-73-6P
                                                   612054-74-7P
                                                                  612054-75-8P
     612054-76-9P
                    612054-77-0P
                                   612054-78-1P
                                                   612054-79-2P
                                                                  612054-80-5P
     612054-81-6P
                    612054-82-7P
                                   612054-83-8P
                                                   612054-84-9P
                                                                  612054-85-0P
     612054-86-1P
                    612054-87-2P
                                   612054-88-3P
                                                   612054-89-4P
                                                                  612054-90-7P
     612054-91-8P
                    612054-92-9P
                                   612054-93-0P
                                                   612054-94-1P
                                                                  612054-95-2P
     612054-96-3P
                    612054-97-4P
                                   612054-98-5P
                                                   612054-99-6P
                                                                  612055-00-2P
     612055-01-3P
                    612055-02-4P
                                   612055-03-5P
                                                   612055-04-6P
                                                                  612055-05-7P
     612055-06-8P
                    612055-07-9P
                                   612055-08-0P
                                                   612055-09-1P
                                                                  612055-10-4P
     612055-11-5P
                    612055-12-6P
                                   612055-13-7P
                                                   612055-14-8P
                                                                  612055-15-9P
     612055-16-0P
                    612055-17-1P
                                   612055-18-2P
                                                   612055-19-3P
                                                                  612055-20-6P
     612055-21-7P
                    612055-22-8P
                                   612055-23-9P
                                                   612055-24-0P
                                                                  612055-25-1P
     612055-26-2P
                    612055-27-3P
                                   612055-28-4P
                                                   612055-29-5P
                                                                  612055-30-8P
     612055-31-9P
                    612055-32-0P
                                  612055-33-1P
                                                   612055-34-2P
                                                                  612055-35-3P
     612055-36-4P
                    612055-37-5P
                                   612055-38-6P
                                                   612055-39-7P
                                                                  612055-40-0P
                    612055-43-3P
                                                                  612055-46-6P
     612055-41-1P
                                   612055-44-4P
                                                   612055-45-5P
     612055-47-7P
                    612055-48-8P
                                   612055-49-9P
                                                   612055-50-2P
                                                                  612055-51-3P
     612055-52-4P
                    612055-53-5P
                                   612055-54-6P
                                                   612055-55-7P
                                                                  612055-56-8P
     612055-57-9P
                    612055-58-0P
                                   612055-59-1P
                                                   612055-60-4P
                                                                  612055-61-5P
     612055-62-6P
                    612055-63-7P
                                   612055-64-8P
                                                   612055-65-9P
                                                                  612055-66-0P
     612055-67-1P
                    612055-68-2P
                                   612055-69-3P
                                                   612055-70-6P
                                                                  612055-71-7P
     612055-72-8P
                    612055-73-9P
                                   612055-74-0P
                                                   612055-75-1P
                                                                  612055-76-2P
     612055-77-3P
                    612055-78-4P
                                   612055-79-5P
                                                   612055-80-8P
                                                                  612055-81-9P
     612055-82-0P
                    612055-83-1P
                                   612055-84-2P
                                                   612055-85-3P
                                                                  612055-86-4P
     612055-87-5P
                    612055-88-6P
                                   612055-89-7P
                                                   612055-90-0P
                                                                  612055-91-1P
     612055-92-2P
                    612055-93-3P
                                   612055-94-4P
                                                   612055-95-5P
                                                                  612055-96-6P
    612055-97-7P
                    612055-98-8P
                                   612055-99-9P
                                                   612056-00-5P
                                                                  612056-01-6P
    612056-02-7P
                    612056-03-8P
                                   612056-05-0P
                                                   612056-06-1P
                                                                  612056-07-2P
    612056-08-3P
                    612056-09-4P
                                   612056-10-7P
                                                   612056-11-8P
                                                                  612056-12-9P
    612056-13-0P
                    612056-14-1P
                                   612056-15-2P
                                                   612056-16-3P
                                                                  612056-17-4P
    612056-18-5P
                    612056-19-6P
                                   612056-20-9P
                                                   612056-21-0P
                                                                  612056-22-1P
    612056-23-2P
                    612056-24-3P
                                   612056-25-4P
                                                   612056-26-5P
                                                                  612056-27-6P
    612056-28-7P 612056-29-8P
                                 612056-30-1P
                                                 612056-31-2P
    612056-32-3P
                    612056-33-4P
                                   612056-34-5P
                                                   612056-35-6P
                                                                  612056-36-7P
    612056-37-8P
                    612056-38-9P
                                   612056-39-0P
                                                   612056-40-3P
                                                                  612056-41-4P
    612056-42-5P
                    612056-43-6P
                                   612056-44-7P
                                                   612056-45-8P
                                                                  612056-46-9P
```

piperazinyl]phenyl]-2-oxo-5-oxazolidinyl]methyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 612056-29-8 HCAPLUS

CN Piperazine, 1-[2-fluoro-4-[(5S)-2-oxo-5-[[(1-thioxoethyl)amino]methyl]-3-oxazolidinyl]phenyl]-4-(1-oxo-3-phenylpropyl)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

L37 ANSWER 7 OF 31 HCAPLUS COPYRIGHT 2006 ACS on STN

AN 2003:492705 HCAPLUS

DN 139:69253

TI Preparation of phenyl oxazolidinone derivatives as potential antimicrobials

IN Mehta, Anita; Arora, Sudershan K.; Das, Biswajit; Ray, Abhijit; Rudra, Sonali; Rattan, Ashok

PA Ranbaxy Laboratories Limited, India

SO U.S. Pat. Appl. Publ., 38 pp., Cont.-in-part of U.S. Ser. No. 906,215. CODEN: USXXCO

DT Patent

LA English

FAN.CNT 2

L MIN.	JN 1 Z						
	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE		
ΡI	US 2003119817	A1	20030626	US 2002-51784	20020117		
	US 6956040	B2	20051018				
	US 2002103186	A1	20020801	US 2001-906215	20010716		
	US 6734307	B2	20040511				
PRAI	US 2001-906215	A2	20010716				
	IN 2000-DE654	Α	20000717				
OS GI	CASREACT 139:69253;	MARPAT	139:69253				

AB Substituted Ph oxazolidinones, e.g. of formula I [T = heterocyclic ring, aryl; R = alkyl, halo, CN, CHO, NH2, NO2, etc.; X = CH, CH-S, CH-O, N; Y, Z = H, alkyl, cycloalkyl, bridging group; U, V = alkyl, F, CL, Br, etc.; W = CH2, CO, CH2NH, etc.; R1 = NHCHR2, NR2CSR2; R2 = H, alkyl, cycloalkyl, alkoxy, etc.], are prepared This invention also relates to pharmaceutical compns. containing the compds. of the present invention as antimicrobials. The compds. are useful antimicrobial agents, effective against a number of human and veterinary pathogens, including gram-pos. aerobic bacteria such as multiply-resistant staphylococci, streptococci and enterococci as well as anaerobic organisms such as Bacterioides spp. and Clostridia spp. species, and acid fast organisms such as Mycobacterium tuberculosis, Mycobacterium avium and Mycobacterium spp. Thus, II was prepared and showed antibacterial activity against several strains.

IC ICM C07D413-14

IT

ICS A61K031-55; A61K031-496

INCL 514217050; 514253100; 514254020; 540598000; 544060000; 544360000; 544369000

CC 28-6 (Heterocyclic Compounds (More Than One Hetero Atom))

Section cross-reference(s): 1, 63

IT 392659-23-3P 392659-24-4P 392659-25-5P 392659-26-6P 392659-27-7P 392659-28-8P 392659-29-9P 392659-30-2P 392659-31-3P 392659-32-4P 392659-33-5P 392659-34-6P **392659-36-8P** 392659-37-9P 392659-41-5P 392659-42-6P 392659-43-7P 392659-44-8P 392659-45-9P 392659-46-0P 392659-47-1P 392659-48-2P 392659-49-3P 392659-50-6P 392659-51-7P 392659-52-8P 392659-55-1P 392659-56-2P 392659-57-3P 392659-59-5P 392659-58-4P 392659-60-8P 392659-61-9P 392659-62-0P 392659-63-1P 392659-64-2P 392659-65-3P 392659-66-4P 392659-67-5P 392659-68-6P 392659-69-7P 392659-70-0P 392659-71-1P 392659-73-3P 392659-74-4P 392659-75-5P 392659-76-6P 392659-77-7P 392659-80-2P 392659-81-3P 392659-86-8P 392659-87-9P 392659-90-4P 392659-88-0P 392659-92-6P 392659-93-7P 392659-94-8P 392659-95-9P 392660-87-6P 548762-60-3P 548762-62-5P 548762-68-1P 548762-69-2P 548762-70-5P 548762-71-6P 548762-72-7P 548762-73-8P 548762-74-9P 548762-76-1P 548762-75-0P 548762-78-3P 548762-79-4P 548762-80-7P RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation);

USES (Uses) (preparation of Ph oxazolidinone derivs. as antibacterial agents)

392659-36-8P 548762-71-6P RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

SACKEY 10/717237 06/05/2006

Page 44

(preparation of Ph oxazolidinone derivs. as antibacterial agents)

RN 392659-36-8 HCAPLUS

CN Acetamide, N-[[(5S)-3-[3-fluoro-4-[4-(2-thienylacetyl)-1-piperazinyl]phenyl]-2-oxo-5-oxazolidinyl]methyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 548762-71-6 HCAPLUS

CN Acetamide, N-[[(5S)-3-[3-fluoro-4-[hexahydro-4-(2-thienylacetyl)-1H-1,4-diazepin-1-yl]phenyl]-2-oxo-5-oxazolidinyl]methyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A

ANSWER 8 OF 31 HCAPLUS COPYRIGHT 2006 ACS on STN L37 AN 2003:319692 HCAPLUS DN 138:338143 Preparation of dual action bactericides comprising a oxazolidinone and a ΤI quinolone or naphthyridinone moiety effective against multi-drug resistant bacteria IN Hubschwerlen, Christian; Specklin, Jean-Luc Morphochem Aktiengesellschaft fuer Kombinatorische Chemie, Germany PΑ SO PCT Int. Appl., 101 pp. CODEN: PIXXD2 Patent DT English LA FAN.CNT 2 PATENT NO. KIND DATE APPLICATION NO. DATE \_ \_ \_ \_ ----------ΡI WO 2003032962 A2 20030424 WO 2002-EP11163 20021004 WO 2003032962 **A3** 20030717 AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO; NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG CA 2460572 20030424 CA 2002-2460572 AΑ 20021004 EP 1432705 20040630 EP 2002-796533 A2 20021004 AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, SK

20040928

20050505

20050622

20050929

20051028

20050309

20011004

20021004

BR 2002-13063

US 2003-491519

CN 2002-819724

JP 2003-535766

NZ 2002-531879

ZA 2004-1909

20021004

20021004

20021004

20021004

20021004

20040309

PRAI US 2001-327162P WO 2002-EP11163 OS MARPAT 138:338143

BR 2002013063

US 2005096343

JP 2005529061

ZA 2004001909

CN 1630655

NZ 531879

Α

**A1** 

Α

T2

Α

Α

P

W

GI

Ι

II

AB The present invention relates to compds. of the Formula (I) that are useful antimicrobial agents and effective against a variety of multi-drug resistant bacteria. The present invention relates to oxazolidinones having a quinolone or naphthyridinone moiety (shown as I; variables defined below; e.g. 7-[4-[4-[(5S)-5-(acetylaminomethyl)-2-oxooxazolidin-3yl]-2-fluorophenyl]piperazin-1-yl]-1-cyclopropyl-6-fluoro-4-oxo-1,4dihydroquinoline-3-carboxylic acid (shown as II)) that are useful antibacterial agents and effective against a variety of multi-drug resistant bacteria. For I: A is a bond, NH, O, S, SO, SO2, SO2NH, PO4, -NH-CO-NH-, -CO-NH-, -CO-, -CO-O-, -NH-CO-O-, alkylene, alkenylene, alkynylene, heteroalkylene, arylene, heteroarylene, cycloalkylene, heterocycloalkylene, alkylarylene or heteroarylalkylene or a combination of two or more of these atoms or groups. X is CR5 or N; Y is CR6 or N; U is F or Cl; n = 0-3; R1 is H, F, Cl, Br, I, OH, NH2, alkyl or heteroalkyl; R2 is H, F or Cl; R3 is H, alkyl, alkenyl, alkynyl, heteroalkyl, cycloalkyl, heterocycloalkyl, aryl, heteroaryl, alkylaryl or heteroarylalkyl; R4 is heteroalkyl, cycloalkyl, heterocycloalkyl, aryl, heteroaryl, alkylaryl or heteroarylalkyl; R5 is H, F, C1, OH, NH2, alkyl or heteroalkyl, or R3 and R5 can be linked via an alkylene, an alkenylene or heteroalkylene or be a part of a cycloalkylene or heterocycloalkylene group, in which case R3 is not H and R5 is not H, F, OH, NH2 or Cl; R6 is H, F, Cl or OMe. Although the methods of preparation are not claimed, 30 example prepns. are included; the examples of this patent and many of the claims are the same as those of WO 03/031443 A1. All examples were tested against several gram pos. and gram neg. bacteria; typical MIC ranges (mg/L) are: S. aureus (MRSA: 0.125-2; MSSA: 0.06-1), E. faecalis  $(\leq 0.03-1)$ , E. faecium  $(\leq 0.03-1)$ , and S. pneumoniae  $(\leq 0.03-1)$ . They all have a broader and more pronounced activity than the corresponding quinolone and oxazolidinone as well as a 1+1 combination of these two compds.

CC 28-9 (Heterocyclic Compounds (More Than One Hetero Atom)) Section cross-reference(s): 1, 63 444335-12-0P, 7-[4-[4-[(5S)-5-[(Acetylamino)methyl]-2-oxooxazolidin-3-yl]-IT 2-fluorophenyl]piperazin-1-yl]-1-cyclopropyl-6-fluoro-4-oxo-1,4dihydroquinoline-3-carboxylic acid 484639-31-8P, 7-[4-[4-[(5S)-5-[(Acetylamino)methyl]-2-oxooxazolidin-3-yl]-2-fluorophenyl]piperazin-1-yl]-1-cyclopropyl-6-fluoro-4-oxo-1,4-dihydro-[1,8]naphthyridine-3-carboxylic 510728-57-1P, 9-[4-[4-[5-[(Acetylamino)methyl]-2-oxooxazolidin-3yl]-2-fluorophenyl]piperazin-1-yl]-8-fluoro-3-methyl-6-oxo-2,3-dihydro-6H-1-oxa-3a-azaphenalene-5-carboxylic acid 510728-58-2P, 7-[(3R,S)-3-[4-[(5S)-5-[(Acetylamino)methyl]-2-oxooxazolidin-3-yl]-2fluorophenylcarbamoyl]piperazin-1-yl]-1-cyclopropyl-6-fluoro-4-oxo-1,4-510728-61-7P, 7-[(3R)-3-[[4-[(5S)-5dihydroquinoline-3-carboxylic acid [(Acetylamino)methyl]-2-oxooxazolidin-3-yl]-2fluorophenyl]amino]pyrrolidin-1-yl]-1-cyclopropyl-6-fluoro-4-oxo-1,4dihydroquinoline-2-carboxylic acid 510728-69-5P, 7-[4-[4-[(5S)-5-[(Acetylamino)methyl]-2-oxooxazolidin-3-yl]-2-fluorophenyl]piperazin-1-yl]-6-fluoro-1-(5-fluoropyridin-2-yl)-4-oxo-1,4-dihydroquinoline-3-carboxylic 510728-73-1P, 7-[4-[4-[(5S)-5-[(Acetylamino)methyl]-2-oxooxazolidin-3-yl]-2-fluorophenyl]piperazin-1-yl]-1-(2,4-difluorophenyl)-6-fluoro-4-oxo-1,4-dihydroquinoline-3-carboxylic acid 510728-75-3P, 7-[4-[4-[(5S)-5-[(Acetylamino)methyl]-2-oxooxazolidin-3-yl]-2fluorophenyl]piperazin-1-yl]-1-cyclopropyl-8-methoxy-4-oxo-1,4dihydroquinoline-3-carboxylic acid 510728-77-5P, 9-[4-[4-[(5S)-5-[(Acetylamino)methyl]-2-oxooxazolidin-3-yl]-2-fluorophenyl]piperazin-1-yl]-8-fluoro-3-methyl-6-oxo-2,3-dihydro-6H-1-oxa-3,3a-diazaphenalene-5carboxylic acid 510728-79-7P, 7-[(3RS)-3-[[[4-[(5S)-5-[(Acetylamino)methyl]-2-oxooxazolidin-3-yl]-2fluorophenyl] (ethyl) amino] methyl]piperazin-1-yl]-1-cyclopropyl-6-fluoro-4oxo-1,4-dihydroquinoline-3-carboxylic acid 510728-89-9P 510728-93-5P, 7-[4-[4-[4-[(5S)-5-[(Acetylamino)methyl]-2-oxooxazolidin-3-yl]-2fluorophenyl]piperazin-1-yl]piperidin-1-yl]-1-cyclopropyl-6-fluoro-4-oxo-1,4-dihydroquinoline-3-carboxylic acid 510729-00-7P, 7-[(3R\*,4R\*)-3-[4-[(5S)-5-[(Acetylamino)methyl]-2-oxooxazolidin-3-yl]-2fluorophenyl]-4-aminomethylpyrrolidin-1-yl]-1-cyclopropyl-6-fluoro-4-oxo-1,4-dihydroquinolin-3-carboxylic acid 510729-10-9P, 7-[4-[2-[4-[4-[(5S)-5-[(Acetylamino)methyl]-2-oxooxazolidin-3-yl]-2fluorophenyl]piperazin-1-yl]-2-oxoethyl]piperazin-1-yl]-1-cyclopropyl-6fluoro-4-oxo-1,4-dihydroquinoline-3-carboxylic acid 510729-13-2P, 7-[3-[[4-[(5S)-5-[(Acetylamino)methyl]-2-oxooxazolidin-3-yl]-2fluorophenyl]amino]azetidin-1-yl]-1-cyclopropyl-6-fluoro-4-oxo-1,4-dihydro-[1,8] naphthyridine-3-carboxylic acid 510729-22-3P, 7-[(3R)-3-[[4-[(5S)-5-[(Acetylamino)methyl]-2-oxooxazolidin-3-yl]-2fluorophenyl]amino]pyrrolidin-1-yl]-1-cyclopropyl-6-fluoro-4-oxo-1,4dihydro-[1,8]naphthyridine-3-carboxylic acid 510729-24-5P, 7-[(3S\*,4R\*)-3-[4-[4-[(5S)-5-[(Acetylamino)methyl]-2-oxooxazolidin-3-yl]-2fluorophenyl]piperazine-1-carbonyl]-4-aminomethylpyrrolidin-1-yl]-1cyclopropyl-6-fluoro-4-oxo-1,4-dihydroquinoline-3-carboxylic acid 510729-35-8P, 7-[(3S\*,4R\*)-3-[4-[4-[(5S)-5-[(Acetylamino)methyl]-2oxooxazolidin-3-yl]-2-fluorophenyl]piperazine-1-carbonyl]-4aminomethylpyrrolidin-1-yl]-1-cyclopropyl-6-fluoro-4-oxo-1,4-dihydro-[1,8]naphthyridine-3-carboxylic acid 510729-38-1P, 7-[4-[5-[(5S)-5-[(Acetylamino)methyl]-2-oxooxazolidin-3-yl]pyridin-2-yl]piperazin-1-yl]-1cyclopropyl-6-fluoro-4-oxo-1,4-dihydro-[1,8]naphthyridine-3-carboxylic 510729-51-8P, 7-[4-[5-[(5S)-5-[(Acetylamino)methyl]-2-oxooxazolidin-3-yl]pyridin-2-yl]piperazin-1-yl]-1-cyclopropyl-6-fluoro-4-oxo-1,4dihydroquinoline-3-carboxylic acid 510729-52-9P, 7-[(3R)-3-[4-[4-[(5S)-5-[(Acetylamino)methyl]-2-oxooxazolidin-3-yl]-2-fluorophenyl]piperazin-1yl]pyrrolidin-1-yl]-1-cyclopropyl-6-fluoro-4-oxo-1,4-dihydro-[1,8]naphthyridine-3-carboxylic acid 510729-61-0P, 1-Cyclopropyl-6-

IT

```
fluoro-7-[4-[2-fluoro-4-[(5R)-5-[(methanesulfonylamino)methyl]-2-
oxooxazolidin-3-yl]phenyl]piperazin-1-yl]-4-oxo-1,4-dihydro-
                                      510729-64-3P, 7-[4-[[4-[(5S)-5-
[1,8]naphthyridine-3-carboxylic acid
[(Acetylamino)methyl]-2-oxooxazolidin-3-yl]-2-fluorophenyl]amino]piperidin-
1-yl]-1-cyclopropyl-6-fluoro-4-oxo-1,4-dihydro-[1,8]naphthyridine-3-
carboxylic acid
                  510729-73-4P, 1-Cyclopropyl-6-fluoro-7-[4-[2-fluoro-4-
[(5S)-5-[[[(methoxy)thiocarbonyl]amino]methyl]-2-oxooxazolidin-3-
yl]phenyl]piperazin-1-yl]-4-oxo-1,4-dihydro-[1,8]naphthyridine-3-
                 510729-74-5P, 1-Cyclopropyl-6-fluoro-7-[4-[2-fluoro-4-
carboxylic acid
[(5S)-5-[[((methylsulfanyl)thiocarbonyl]amino]methyl]-2-oxooxazolidin-3-
yl]phenyl]piperazin-1-yl]-4-oxo-1,4-dihydro-[1,8]naphthyridine-3-
carboxylic acid
                  510729-77-8P, 1-Cyclopropyl-6-fluoro-2-[4-[2-fluoro-4-
((5S)-2-oxo-5-thioureidomethyloxazolidin-3-yl)phenyl]piperazin-1-yl]-4-oxo-
1,4-dihydro-[1,8]naphthyridine-3-carboxylic acid
                                                   510729-80-3P,
7-[4-[4-[(5S)-5-[(Acetylamino)methyl]-2-oxooxazolidin-3-yl]-2-
fluorophenoxy]piperidin-1-yl]-1-cyclopropyl-6-fluoro-4-oxo-1,4-dihydro-
                                      510729-81-4P, 7-[4-[4-[(5S)-5-
[1,8]naphthyridine-3-carboxylic acid
[(Acetylamino)methyl]-2-oxooxazolidin-3-yl]-2-fluorophenoxy]piperidin-1-
yl]-1-cyclopropyl-6-fluoro-4-oxo-1,4-dihydroquinoline-3-carboxylic acid
510729-82-5P, 7-[4-[[4-[(5S)-5-[(Acetylamino)methyl]-2-oxooxazolidin-3-yl]-
2-fluorophenyl]sulfanyl]piperidin-1-yl]-1-cyclopropyl-6-fluoro-4-oxo-1,4-
dihydroquinoline-3-carboxylic acid
                                    510729-84-7P, 7-[4-[[4-[(5S)-5-
[(Acetylamino)methyl]-2-oxooxazolidin-3-yl]-2-
fluorophenyl]sulfanyl]piperidin-1-yl]-1-cyclopropyl-6-fluoro-4-oxo-1,4-
dihydro-[1,8]naphthyridine-3-carboxylic acid
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU
(Therapeutic use); BIOL (Biological study); PREP (Preparation);
USES (Uses)
   (drug candidate; preparation of dual action bactericides comprising
   oxazolidinone and quinolone or naphthyridinone moiety effective against
   multi-drug resistant bacteria)
98105-93-2P, 7-Chloro-1-(2,4-difluorophenyl)-6-fluoro-4-oxo-1,4-
dihydroquinoline-3-carboxylic acid
                                     98105-94-3P, 7-Chloro-1-(2,4-
difluorophenyl)-6-fluoro-4-oxo-1,4-dihydroquinoline-3-carboxylic acid
              510728-59-3P, 2-[4-[(5S)-5-[(Acetylamino)methyl]-2-
ethyl ester
oxooxazolidin-3-yl]-2-fluorophenylcarbamoyl]piperazine-1,4-dicarboxylic
acid di-tert-butyl ester
                           510728-60-6P, 2-[4-[(5S)-5-
[(Acetylamino)methyl]-2-oxooxazolidin-3-yl]-2-
fluorophenylcarbamoyl]piperazine
                                   510728-62-8P, (3R)-3-[(2-Fluoro-4-
nitrophenyl)amino]pyrrolidine-1-carboxylic acid allyl ester
510728-63-9P, (3R)-3-[(2-Fluoro-4-nitrophenyl)amino]pyrrolidine-1-
carboxylic acid tert-butyl ester
                                   510728-64-0P, (3R)-3-
[Benzyloxycarbonyl (4-benzyloxycarbonylamino-2-
fluorophenyl)amino]pyrrolidine-1-carboxylic acid tert-butyl ester
510728-65-1P, (3R)-3-[Benzyloxycarbonyl[2-fluoro-4-((5R)-5-hydroxymethyl-2-
oxooxazolidin-3-yl)phenyl]amino]pyrrolidine-1-carboxylic acid tert-butyl
        510728-66-2P, (3R)-3-[[4-((5R)-5-Azidomethyl-2-oxooxazolidin-3-yl)-
2-fluorophenyl]benzyloxycarbonylamino]pyrrolidine-1-carboxylic acid
tert-butyl ester
                  510728-67-3P, (3R)-3-[[4-[(5S)-5-[(Acetylamino)methyl]-
2-oxooxazolidin-3-yl]-2-fluorophenyl]amino]pyrrolidine-1-carboxylic acid
tert-butyl ester
                   510728-68-4P, N-[[(5S)-3-[3-Fluoro-4-((3R)-pyrrolidin-3-
ylamino)phenyl]-2-oxooxazolidin-5-yl]methyl]acetamide
                                                        510728-70-8P,
7-Chloro-6-fluoro-1-(5-fluoropyridin-2-yl)-4-oxo-1,4-dihydroquinoline-3-
carboxylic acid ethyl ester
                             510728-71-9P, 7-Chloro-6-fluoro-1-(5-
fluoropyridin-2-yl)-4-oxo-1,4-dihydroquinoline-3-carboxylic acid
510728-72-0P, 7-Chloro-6-fluoro-1-(5-fluoropyridin-2-yl)-4-oxo-1,4-
dihydroquinoline-3-carboxylatoboron diacetate
                                               510728-74-2P,
7-Chloro-1-(2,4-difluorophenyl)-6-fluoro-4-oxo-1,4-dihydroquinoline-3-
```

methoxy-4-oxo-1,4-dihydroquinoline-3-carboxylatoboron diacetate

carboxylatoboron diacetate

510728-76-4P, 1-Cyclopropyl-7-fluoro-8-

```
510728-78-6P, 9-[4-[4-[(5S)-5-[(Acetylamino)methyl]-2-oxooxazolidin-3-yl]-
2-fluorophenyl]piperazin-1-yl]-8-fluoro-3-methyl-6-oxo-2,3-dihydro-6H-1-
oxa-3,3a-diazaphenalene-5-carboxylic acid ethyl ester
                                                        510728-80-0P,
[(1,4-Dibenzylpiperazin-2-yl)methylene](ethyl)amine
                                                      510728-81-1P,
(1,4-Dibenzylpiperazin-2-ylmethyl) (ethyl) amine
                                                 510728-82-2P,
[(1,4-Dibenzylpiperazin-2-yl)methyl]ethyl(2-fluoro-4-nitrophenyl)amine
510728-83-3P, [4-[(1,4-Dibenzylpiperazin-2-ylmethyl)(ethyl)amino]-3-
fluorophenyl]carbamic acid benzyl ester
                                         510728-84-4P,
(5R) -3-[4-[(1,4-Dibenzylpiperazin-2-ylmethyl)(ethyl)amino]-3-fluorophenyl]-
5-hydroxymethyloxazolidin-2-one
                                 510728-85-5P, Methanesulfonic acid
[(5R)-3-[4-[(1,4-Dibenzylpiperazin-2-ylmethyl)(ethyl)amino]-3-
fluorophenyl]-2-oxooxazolidin-5-yl]methyl ester
                                                  510728-86-6P,
(5R)-5-Azidomethyl-3-[4-[(1,4-Dibenzylpiperazin-2-ylmethyl)(ethyl)amino]-3-
fluorophenyl]oxazolidin-2-one
                                510728-87-7P, N-[[(5S)-3-[4-[(1,4-
Dibenzylpiperazin-2-ylmethyl) (ethyl) amino]-3-fluorophenyl]-2-oxooxazolidin-
                       510728-88-8P, N-[[(5S)-3-[4-[(Piperazin-2-
5-yl]methyl]acetamide
ylmethyl) (ethyl) amino] -3-fluorophenyl] -2-oxooxazolidin-5-
                     510728-90-2P, 4-[2-[4-[4-[(5S)-5-
yl]methyl]acetamide
[(Acetylamino)methyl]-2-oxooxazolidin-3-yl]-2-fluorophenyl]piperazin-1-
yl]ethyl]piperazine-1-carboxylic acid tert-butyl ester
                                                         510728-91-3P,
N-[[(5S)-3-[3-Fluoro-4-[4-(2-(piperazin-1-yl)ethyl)piperazin-1-yl]phenyl]-
2-oxooxazolidin-5-yl]methyl]acetamide 510728-92-4P, 6,7-Difluoro-1-
cyclopropyl-4-oxo-1,4-dihydroquinoline-3-carboxylatoborondiacetat
510728-94-6P, 1-(1-Benzylpiperidin-4-yl)-4-(2-fluoro-4-
nitrophenyl)piperazine
                       510728-95-7P, 4-[4-(4-Benzyloxycarbonylamino-2-
fluorophenyl)piperazin-1-yl]piperidine-1-carboxylic acid benzyl ester
510728-96-8P, 4-[4-[2-Fluoro-4-((5R)-5-hydroxymethyl-2-oxooxazolidin-3-
yl)phenyl]piperazin-1-yl]piperidin-1-carboxylic acid benzyl ester
510728-97-9P, 4-[4-(4-((5R)-5-Azidomethyl-2-oxooxazolidin-3-yl)-2-
fluorophenyl]piperazin-1-yl]piperidin-1-carboxylic acid benzyl ester
510728-98-0P, 4-[4-[4-[(5S)-5-[(Acetylamino)methyl]-2-oxooxazolidin-3-yl]-
2-fluorophenyl]piperazin-1-yl]piperidin-1-carboxylic acid benzyl ester
510728-99-1P, N-[[(5S)-3-[3-Fluoro-4-(4-(piperidin-4-yl)piperazin-1-
                                                   510729-01-8P,
yl)phenyl]-2-oxooxazolidin-5-yl]methyl]acetamide
(4-Bromo-3-fluorophenyl)carbamic acid benzyl ester
                                                     510729-02-9P,
3-(4-Benzyloxycarbonylamino-2-fluorophenyl)acrylic acid ethyl ester ...
510729-03-0P, (3R*,4S*)-1-Benzyl-4-(4-benzyloxycarbonylamino-2-
fluorophenyl)pyrrolidine-3-carboxylic acid ethyl ester
                                                         510729-04-1P,
[4-[(3S*,4R*)-1-Benzyl-4-hydroxymethylpyrrolidin-3-yl]-3-
fluorophenyl]carbamic acid benzyl ester
                                          510729-05-2P,
[4-[(3S*,4R*)-4-Azidomethyl-1-benzylpyrrolidin-3-yl]-3-
fluorophenyl]carbamic acid benzyl ester
                                          510729-06-3P,
[4-[(3S*,4R*)-1-Benzyl-4-[(tert-butoxycarbonylamino)methyl]pyrrolidin-3-
yl]-3-fluorophenyl]carbamic acid benzyl ester
                                                510729-07-4P,
[(3S*,4R*)-1-Benzyl-4-[2-fluoro-4-((5R)-5-hydroxymethyl-2-oxooxazolidin-3-
yl)phenyl]pyrrolidin-3-yl]methyl]carbamic acid tert-butyl ester
510729-08-5P, [[(3S*,4R*)-4-[4-[(5S)-5-[(Acetylamino)methyl]-2-
oxooxazolidin-3-yl]-2-fluorophenyl]-1-benzylpyrrolidin-3-
yl]methyl]carbamic acid tert-butyl ester
                                           510729-09-6P,
[(3S*,4R*)-4-[4-[(5S)-5-[(Acetylamino)methyl]-2-oxooxazolidin-3-yl]-2-
fluorophenyl]pyrrolidin-3-yl]methyl]carbamic acid tert-butyl ester
510729-11-0P, 4-[2-[4-[4-[(5S)-5-[(Acetylamino)methyl]-2-
oxooxazolidin-3-yl]-2-fluorophenyl]piperazin-1-yl]-2-oxoethyl]piperazine-1-
carboxylic acid tert-butyl ester 510729-12-1P,
N-[[(5S)-3-[3-Fluoro-4-[4-(2-(piperazin-1-yl)acetyl)piperazin-1-yl]phenyl]
                                        510729-14-3P, (1-
2-oxooxazolidin-5-yl]methyl]acetamide
Benzhydrylazetidin-3-yl) (2-fluoro-4-nitrophenyl) amine
                                                        510729-15-4P.
3-[Benzyloxycarbonyl[4-(benzyloxycarbonylamino)-2-
fluorophenyl]amino]azetidine-1-carboxylic acid benzyl ester
510729-16-5P, 3-[Benzyloxycarbonyl[2-fluoro-4-((5R)-5-hydroxymethyl-2-
```

oxooxazolidin-3-yl)phenyl]amino]azetidine-1-carboxylic acid benzyl ester 510729-17-6P, 3-[[4-((5R)-5-Azidomethyl-2-oxooxazolidin-3-yl)-2fluorophenyl]benzyloxycarbonylamino]azetidine-1-carboxylic acid benzyl 510729-18-7P, 3-[[4-[(5S)-5-[(Acetylamino)methyl]-2-oxooxazolidin-3-yl]-2-fluorophenyl]benzyloxycarbonylamino]azetidine-1-carboxylic acid 510729-20-1P, N-[[(5S)-3-[4-(Azetidin-3-ylamino)-3benzyl ester fluorophenyl]-2-oxooxazolidin-5-yl]methyl]acetamide 510729-25-6P, (3S\*,4S\*)-1-Benzyl-4-[(tert-butoxycarbonylamino)methyl]pyrrolidine-3carboxylic acid ethyl ester 510729-29-0P, (3S\*,4S\*)-1-Benzyl-4-[(tertbutoxycarbonylamino) methyl]pyrrolidine-3-carboxylic acid 510729-31-4P, [(3S\*,4S\*)-4-[4-[4-[(5S)-5-[(Acetylamino)methyl]-2-oxooxazolidin-3-yl]-2-incomplex of the context of the contfluorophenyl]piperazine-1-carbonyl]-1-benzylpyrrolidin-3yl]methyl]carbamic acid tert-butyl ester 510729-33-6P, [[(3S\*,4S\*)-4-[4-[4-[(5S)-5-[(Acetylamino)methyl]-2-oxooxazolidin-3-yl]-2fluorophenyl]piperazine-1-carbonyl]pyrrolidin-3-yl]methyl]carbamic acid tert-butyl ester 510729-40-5P, 4-(5-(Benzyloxycarbonylamino)pyridin-2yl)piperazine-1-carboxylic acid tert-butyl ester 510729-43-8P, 4-[5-((5R)-5-Hydroxymethyl-2-oxooxazolidin-3-yl)pyridin-2-yl]piperazine-1-510729-45-0P, 4-[5-((5R)-5-Azidomethylcarboxylic acid tert-butyl ester 2-oxooxazolidin-3-yl)pyridin-2-yl]piperazine-1-carboxylic acid tert-butyl 510729-47-2P, 4-[5-[(5S)-5-[(Acetylamino)methyl]-2-oxooxazolidin-3yl]pyridin-2-yl]piperazine-1-carboxylic acid tert-butyl ester 510729-49-4P, N-[[(5S)-2-0xo-3-(6-(piperazin-1-yl)pyridin-3-yl)oxazolidin-5-yl]methyl]acetamide 510729-53-0P, (3R)-3-[4-(2-Fluoro-4nitrophenyl)piperazin-1-yl|pyrrolidine-1-carboxylic acid allyl ester 510729-54-1P, (3R)-3-[4-(2-Fluoro-4-nitrophenyl)piperazin-1-yl]pyrrolidine-1-carboxylic acid tert-butyl ester 510729-55-2P, (3R)-3-[4-[2-Fluoro-4-((5R)-5-hydroxymethyl-2-oxooxazolidin-3-yl)phenyl)piperazin-1yl]pyrrolidine-1-carboxylic acid tert-butyl ester 510729-56-3P, (3R)-3-[4-(4-Benzyloxycarbonylamino-2-fluorophenyl)piperazin-1yl]pyrrolidine-1-carboxylic acid tert-butyl ester 510729-57-4P. (3R) - 3 - [4 - [4 - ((5R) - 5 - Azidomethyl - 2 - oxooxazolidin - 3 - yl) - 2 fluorophenyl]piperazin-1-yl]pyrrolidine-1-carboxylic acid tert-butyl ester 510729-58-5P, (3R)-3-[4-[4-((5S)-5-[(Acetylamino)methyl]-2-oxooxazolidin-3yl)-2-fluorophenyl]piperazin-1-yl]pyrrolidine-1-carboxylic acid tert-butyl 510729-60-9P, N-[[(5S)-3-[3-Fluoro-4-[4-((3R)-pyrrolidin-3yl)piperazin-1-yl]phenyl]-2-oxooxazolidin-5-yl]methyl]acetamide 510729-62-1P, 4-[2-Fluoro-4-[(5R)-5-[(methanesulfonylamino)methyl]-2oxooxazolidin-3-yl]phenyl]piperazin-1-carboxylic acid tert-butyl ester 510729-63-2P, N-[[(5R)-3-(3-Fluoro-4-(piperazin-1-yl)phenyl)-2oxooxazolidin-5-yl]methyl]methanesulfonamide 510729-65-4P, (1-Benzylpiperidin-4-yl) (2-fluoro-4-nitrophenyl) amine 510729-66-5P. 2-Fluoro-N'-(piperidin-4-yl)benzene-1,4-diamine 510729-67-6P. 4-[(4-Benzyloxycarbonylamino-2-fluorophenyl)amino]piperidine-1-carboxylic 510729-68-7P, 4-[[2-Fluoro-4-((5R)-5-hydroxymethyl-2acid benzyl ester oxooxazolidin-3-yl)phenyl]amino]piperidine-1-carboxylic acid benzyl ester 510729-69-8P, 4-[[4-((5R)-5-Azidomethyl-2-oxooxazolidin-3-yl)-2fluorophenyl]amino]piperidine-1-carboxylic acid benzyl ester 510729-70-1P, 4-[[4-((5S)-5-Aminomethyl-2-oxooxazolidin-3-yl)-2fluorophenyl]amino]piperidine-1-carboxylic acid benzyl ester 510729-71-2P, 4-[[4-[(5S)-5-[(Acetylamino)methyl]-2-oxooxazolidin-3-yl]-2fluorophenyl]amino]piperidine-1-carboxylic acid benzyl ester 510729-72-3P, N-[[(5S)-3-[3-Fluoro-4-(piperidin-4-ylamino)phenyl]-2oxooxazolidin-5-yl]methyl]acetamide 510729-75-6P, 4-[2-Fluoro-4-[(5S)-5-[[[(methylsulfanyl)thiocarbonyl]amino]methyl]-2-oxooxazolidin-3yl]phenyl]piperazine-1-carboxylic acid tert-butyl ester 510729-76-7P, [[(5S)-3-(3-Fluoro-4-(piperazin-1-yl)phenyl)-2-oxooxazolidin-5yl]methyl]dithiocarbamic acid methyl ester 510729-78-9P, 4-[2-Fluoro-4-((5S)-2-oxo-5-thioureidomethyloxazolidin-3yl)phenyl]piperazine-1-carboxylic acid tert-butyl ester 510729-79-0P,

[[(5S)-3-(3-Fluoro-4-(piperazin-1-yl)phenyl)-2-oxooxazolidin-5-yl]methyl]thiourea 510729-83-6P, (S)-N-[[3-[3-Fluoro-4-(4-piperidinylsulfanyl)phenyl]-2-oxo-5-oxazolidinyl]methyl]acetamide RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation of dual action bactericides comprising oxazolidinone and quinolone or naphthyridinone moiety effective against multi-drug resistant bacteria)

(drug candidate; preparation of dual action bactericides comprising oxazolidinone and quinolone or naphthyridinone moiety effective against multi-drug resistant bacteria)

RN 510729-10-9 HCAPLUS

CN 3-Quinolinecarboxylic acid, 7-[4-[2-[4-[4-[(5S)-5-[(acetylamino)methyl]-2-oxo-3-oxazolidinyl]-2-fluorophenyl]-1-piperazinyl]-2-oxoethyl]-1-piperazinyl]-1-cyclopropyl-6-fluoro-1,4-dihydro-4-oxo-(9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A

CO2H

ΙT 510729-11-0P, 4-[2-[4-[4-[(5S)-5-[(Acetylamino)methyl]-2oxooxazolidin-3-yl]-2-fluorophenyl]piperazin-1-yl]-2-oxoethyl]piperazine-1carboxylic acid tert-butyl ester 510729-12-1P, N-[((5S)-3-[3-Fluoro-4-[4-(2-(piperazin-1-yl)acetyl)piperazin-1-yl]phenyl]-2-oxooxazolidin-5-yl]methyl]acetamide RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent) (preparation of dual action bactericides comprising oxazolidinone and quinolone or naphthyridinone moiety effective against multi-drug resistant bacteria) 510729-11-0 HCAPLUS RNCN 1-Piperazinecarboxylic acid, 4-[2-[4-[4-[(5S)-5-[(acetylamino)methyl]-2oxo-3-oxazolidinyl]-2-fluorophenyl]-1-piperazinyl]-2-oxoethyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

```
RN 510729-12-1 HCAPLUS
```

CN Acetamide, N-[[(5S)-3-[3-fluoro-4-[4-(1-piperazinylacetyl)-1-piperazinyl]phenyl]-2-oxo-5-oxazolidinyl]methyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

```
L37 ANSWER 9 OF 31 HCAPLUS COPYRIGHT 2006 ACS on STN
```

AN 2003:301084 HCAPLUS

DN 138:304289

TI Preparation of dual action bactericides comprising a oxazolidinone and a quinolone or naphthyridinone moiety effective against multi-drug resistant bacteria

IN Hubschwerlen, Christian; Specklin, Jean-Luc

PA Morphochem Aktiengesellschaft fuer Kombinatorische Chemie, Germany

SO PCT Int. Appl., 100 pp.

CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 2

FAN. CNT 2																		
	PATENT NO.					KIND DATE			APPLICATION NO.						DATE			
					-													
ΡI	WO 2003031443		A1		20030417		WO 2002-EP10766						20020925					
	W:	ΑE,	AG,	AL,	AM,	AT,	AU,	ΑZ,	BA,	BB,	BG,	BR,	BY,	ΒZ,	CA,	CH,	CN,	
•		CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	ES,	FI,	GB,	GD,	GE,	GH,	
		GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	KE,	KG,	ΚP,	KR,	ΚZ,	LC,	LK,	LR,	
		LS,	LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	ΜZ,	NO,	ΝZ,	OM,	PH,	
		PL,	PT,	RO,	RU,	SD,	SE,	SG,	SI,	SK,	SL,	ТJ,	TM,	TN,	TR,	TT,	TZ,	
		UA,	ŪĠ,	US,	UΖ,	VN,	YU,	ZA,	ZM,	ZW								
	RW:	GH,	GM,	KE,	LS,	MW,	ΜZ,	SD,	SL,	SZ,	TZ,	ŪĠ,	ZM,	ZW,	AM,	ΑZ,	BY,	
		KG,	ΚZ,	MD,	RU,	TJ,	TM,	AT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,	EE,	ES,	
		FI,	FR,	GB,	GR,	ΙE,	IT,	LU,	MC,	NL,	PT,	SE,	SK,	TR,	BF,	ВJ,	CF,	
		CG,	CI,	CM,	GΑ,	GN,	GQ,	GW,	ML,	MR,	ΝE,	SN,	TD,	TG				
	CN 1630									CN 2					20021004			
	ZA 2004001909				Α		2005	050309 ZA 2004-1909						20040309				
PRAI	US 2001	P		2001	1004													
os	MARPAT	138:3	30428	39														

AΒ The present invention relates to oxazolidinones having a quinolone or naphthyridinone moiety (shown as I; variables defined below; e.g. 7-[4-[4-[(5S)-5-(acetylaminomethyl)-2-oxooxazolidin-3-yl]-2fluorophenyl]piperazin-1-yl]-1-cyclopropyl-6-fluoro-4-oxo-1,4dihydroquinoline-3-carboxylic acid (shown as II)) that are useful antibacterial agents and effective against a variety of multi-drug resistant bacteria. For I: A is a bond, NH, O, S, SO, SO2, SO2NH, PO4, -NH-CO-NH-, -CO-NH-, -CO-, -CO-O-, -NH-CO-O-, alkylene, alkenylene, alkynylene, heteroalkylene, arylene, heteroarylene, cycloalkylene, heterocycloalkylene, alkylarylene or heteroarylalkylene or a combination of two or more of these atoms or groups. X is CR5 or N; Y is CR6 or N; U is F or Cl; n = 0-3; R1 is H, F, Cl, Br, I, OH, NH2, alkyl or heteroalkyl; R2 is H, F or Cl; R3 is H, alkyl, alkenyl, alkynyl, heteroalkyl, cycloalkyl, heterocycloalkyl, aryl, heteroaryl, alkylaryl or heteroarylalkyl; R4 is heteroalkyl, cycloalkyl, heterocycloalkyl, aryl, heteroaryl, alkylaryl or heteroarylalkyl; R5 is H, F, Cl, OH, NH2, alkyl or heteroalkyl, or R3 and R5 can be linked via an alkylene, an alkenylene or heteroalkylene or be a part of a cycloalkylene or heterocycloalkylene group, in which case R3 is not H and R5 is not H, F, OH, NH2 or Cl; R6 is H, F, Cl or OMe. Although the methods of preparation are not claimed, 30 example prepns. are included. All examples were tested against several gram pos. and gram neg. bacteria; typical MIC ranges (mg/L) are: S. aureus (MRSA: 0.125-2; MSSA: 0.06-1), E. faecalis (≤0.03-1), E. faecium  $(\leq 0.03-1)$ , and S. pneumoniae  $(\leq 0.03-1)$ . They all have a broader and more pronounced activity than the corresponding quinolone and oxazolidinone as well as a 1+1 combination of these two compds. IC ICM C07D413-14

```
ICS C07D413-12; C07D498-04; C07D471-04; A61K031-496; A61P031-04
    28-9 (Heterocyclic Compounds (More Than One Hetero Atom))
CC
    Section cross-reference(s): 1, 63
     444335-12-0P, 7-[4-[4-[(5S)-5-[(Acetylamino)methyl]-2-oxooxazolidin-3-yl]-
IT
     2-fluorophenyl]piperazin-1-yl]-1-cyclopropyl-6-fluoro-4-oxo-1,4-
                                        484639-31-8P, 7-[4-[4-[(5S)-5-
    dihydroquinoline-3-carboxylic acid
     [(Acetylamino)methyl]-2-oxooxazolidin-3-yl]-2-fluorophenyl]piperazin-1-yl]-
     1-cyclopropyl-6-fluoro-4-oxo-1,4-dihydro-[1,8]naphthyridine-3-carboxylic
           510728-57-1P, 9-[4-[4-[5-[(Acetylamino)methyl]-2-oxooxazolidin-3-
    yl]-2-fluorophenyl]piperazin-1-yl]-8-fluoro-3-methyl-6-oxo-2,3-dihydro-6H-
     1-oxa-3a-azaphenalene-5-carboxylic acid
                                              510728-58-2P,
    7-[(3R,S)-3-[4-[(5S)-5-[(Acetylamino)methyl]-2-oxooxazolidin-3-yl]-2-
    fluorophenylcarbamoyl]piperazin-1-yl]-1-cyclopropyl-6-fluoro-4-oxo-1,4-
                                        510728-61-7P, 7-[(3R)-3-[[4-[(5S)-5-
    dihydroquinoline-3-carboxylic acid
     [(Acetylamino)methyl]-2-oxooxazolidin-3-yl]-2-
    fluorophenyl]amino]pyrrolidin-1-yl]-1-cyclopropyl-6-fluoro-4-oxo-1,4-
    dihydroquinoline-2-carboxylic acid
                                         510728-69-5P, 7-[4-[4-[(5S)-5-
     [(Acetylamino)methyl]-2-oxooxazolidin-3-yl]-2-fluorophenyl]piperazin-1-yl]-
    6-fluoro-1-(5-fluoropyridin-2-yl)-4-oxo-1,4-dihydroquinoline-3-carboxylic
           510728-73-1P, 7-[4-[4-[(5S)-5-[(Acetylamino)methyl]-2-oxooxazolidin-
    3-yl]-2-fluorophenyl]piperazin-1-yl]-1-(2,4-difluorophenyl)-6-fluoro-4-oxo-
    1,4-dihydroquinoline-3-carboxylic acid
                                             510728-75-3P,
    7-[4-[4-[(5S)-5-[(Acetylamino)methyl]-2-oxooxazolidin-3-yl]-2-
    fluorophenyl]piperazin-1-yl]-1-cyclopropyl-8-methoxy-4-oxo-1,4-
                                         510728-77-5P, 9-[4-[4-[(5S)-5-
    dihydroquinoline-3-carboxylic acid
     [(Acetylamino)methyl]-2-oxooxazolidin-3-yl]-2-fluorophenyl]piperazin-1-yl]-
    8-fluoro-3-methyl-6-oxo-2,3-dihydro-6H-1-oxa-3,3a-diazaphenalene-5-
    carboxylic acid
                      510728-79-7P, 7-[(3RS)-3-[[[4-[(5S)-5-
     [(Acetylamino)methyl]-2-oxooxazolidin-3-yl]-2-
    fluorophenyl] (ethyl) amino] methyl] piperazin-1-yl] -1-cyclopropyl-6-fluoro-4-
    oxo-1,4-dihydroquinoline-3-carboxylic acid 510728-89-9P,
    7-[4-[2-[4-[4-[(5S)-5-[(Acetylamino)methyl]-2-oxooxazolidin-3-yl]-2-
    fluorophenyl]piperazin-1-yl]ethyl]piperazin-1-yl]-1-cyclopropyl-6-fluoro-4-
    oxo-1,4-dihydroquinoline-3-carboxylic acid
                                                  510728-93-5P,
    7-[4-[4-[4-[(5S)-5-[(Acetylamino)methyl]-2-oxooxazolidin-3-yl]-2-
    fluorophenyl]piperazin-1-yl]piperidin-1-yl]-1-cyclopropyl-6-fluoro-4-oxo-
    1,4-dihydroquinoline-3-carboxylic acid
                                              510729-00-7P,
    7-[(3R*,4R*)-3-[4-[(5S)-5-[(Acetylamino)methyl]-2-oxooxazolidin-3-yl]-2-
    fluorophenyl]-4-aminomethylpyrrolidin-1-yl]-1-cyclopropyl-6-fluoro-4-oxo-
    1,4-dihydroquinolin-3-carboxylic acid 510729-10-9P,
    7-[4-[2-[4-[4-[(5S)-5-[(Acetylamino)methyl]-2-oxooxazolidin-3-yl]-2-
    fluorophenyl]piperazin-1-yl]-2-oxoethyl]piperazin-1-yl]-1-cyclopropyl-6-
    fluoro-4-oxo-1,4-dihydroquinoline-3-carboxylic acid
                                                           510729-13-2P,
    7-[3-[[4-[(5S)-5-[(Acetylamino)methyl]-2-oxooxazolidin-3-yl]-2-
    fluorophenyl]amino]azetidin-1-yl]-1-cyclopropyl-6-fluoro-4-oxo-1,4-dihydro-
     [1,8]naphthyridine-3-carboxylic acid
                                           510729-22-3P, 7-[(3R)-3-[[4-[(5S)-5-
     [(Acetylamino)methyl]-2-oxooxazolidin-3-yl]-2-
    fluorophenyl]amino]pyrrolidin-1-yl]-1-cyclopropyl-6-fluoro-4-oxo-1,4-
    dihydro-[1,8]naphthyridine-3-carboxylic acid
                                                   510729-24-5P,
    7-[(3S*,4R*)-3-[4-[4-[(5S)-5-[(Acetylamino)methyl]-2-oxooxazolidin-3-yl]-2-
    fluorophenyl]piperazine-1-carbonyl]-4-aminomethylpyrrolidin-1-yl]-1-
    cyclopropyl-6-fluoro-4-oxo-1,4-dihydroquinoline-3-carboxylic acid
    510729-35-8P, 7-[(3S*,4R*)-3-[4-[4-[(5S)-5-[(Acetylamino)methyl]-2-
    oxooxazolidin-3-yl]-2-fluorophenyl]piperazine-1-carbonyl]-4-
    aminomethylpyrrolidin-1-yl]-1-cyclopropyl-6-fluoro-4-oxo-1,4-dihydro-
    [1,8]naphthyridine-3-carboxylic acid
                                           510729-38-1P, 7-[4-[5-[(5S)-5-
    [(Acetylamino)methyl]-2-oxooxazolidin-3-yl]pyridin-2-yl]piperazin-1-yl]-1-
    cyclopropyl-6-fluoro-4-oxo-1,4-dihydro-[1,8]naphthyridine-3-carboxylic
           510729-51-8P, 7-[4-[5-[(5S)-5-[(Acetylamino)methyl]-2-oxooxazolidin-
    3-yllpyridin-2-yllpiperazin-1-yll-1-cyclopropyl-6-fluoro-4-oxo-1,4-
```

IT

```
dihydroquinoline-3-carboxylic acid
                                     510729-52-9P, 7-[(3R)-3-[4-[4-[(5S)-5-
[(Acetylamino)methyl]-2-oxooxazolidin-3-yl]-2-fluorophenyl]piperazin-1-
yl]pyrrolidin-1-yl]-1-cyclopropyl-6-fluoro-4-oxo-1,4-dihydro-
[1,8]naphthyridine-3-carboxylic acid
                                      510729-61-0P, 1-Cyclopropyl-6-
fluoro-7-[4-[2-fluoro-4-[(5R)-5-[(methanesulfonylamino)methyl]-2-
oxooxazolidin-3-yl]phenyl]piperazin-1-yl]-4-oxo-1,4-dihydro-
                                      510729-64-3P, 7-[4-[[4-[(5S)-5-
[1,8]naphthyridine-3-carboxylic acid
[(Acetylamino)methyl]-2-oxooxazolidin-3-yl]-2-fluorophenyl]amino]piperidin-
1-yl]-1-cyclopropyl-6-fluoro-4-oxo-1,4-dihydro-[1,8]naphthyridine-3-
carboxylic acid
                  510729-73-4P, 1-Cyclopropyl-6-fluoro-7-[4-[2-fluoro-4-
[(5S)-5-[[[(methoxy)thiocarbonyl]amino]methyl]-2-oxooxazolidin-3-
yl]phenyl]piperazin-1-yl]-4-oxo-1,4-dihydro-[1,8]naphthyridine-3-
                  510729-74-5P, 1-Cyclopropyl-6-fluoro-7-[4-[2-fluoro-4-
carboxylic acid
[(5S)-5-[[[(methylsulfanyl)thiocarbonyl]amino]methyl]-2-oxooxazolidin-3-
yl]phenyl]piperazin-1-yl]-4-oxo-1,4-dihydro-[1,8]naphthyridine-3-
carboxylic acid
                 510729-77-8P, 1-Cyclopropyl-6-fluoro-2-[4-[2-fluoro-4-
((5S)-2-oxo-5-thioureidomethyloxazolidin-3-yl)phenyl]piperazin-1-yl]-4-oxo-
1,4-dihydro-[1,8]naphthyridine-3-carboxylic acid
                                                   510729-80-3P,
7-[4-[4-[(5S)-5-[(Acetylamino)methyl]-2-oxooxazolidin-3-yl]-2-
fluorophenoxy]piperidin-1-yl]-1-cyclopropyl-6-fluoro-4-oxo-1,4-dihydro-
[1,8]naphthyridine-3-carboxylic acid
                                      510729-81-4P, 7-[4-[4-[(5S)-5-
[(Acetylamino)methyl]-2-oxooxazolidin-3-yl]-2-fluorophenoxy]piperidin-1-
yl]-1-cyclopropyl-6-fluoro-4-oxo-1,4-dihydroquinoline-3-carboxylic acid
510729-82-5P, '7-[4-[[4-[(5S)-5-[(Acetylamino)methyl]-2-oxooxazolidin-3-yl]-
2-fluorophenyl]sulfanyl]piperidin-1-yl]-1-cyclopropyl-6-fluoro-4-oxo-1,4-
dihydroquinoline-3-carboxylic acid
                                    510729-84-7P, 7-[4-[[4-[(5S)-5-
[(Acetylamino)methyl]-2-oxooxazolidin-3-yl]-2-
fluorophenyl]sulfanyl]piperidin-1-yl]-1-cyclopropyl-6-fluoro-4-oxo-1,4-
dihydro-[1,8]naphthyridine-3-carboxylic acid
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU
(Therapeutic use); BIOL (Biological study); PREP (Preparation);
USES (Uses)
   (drug candidate; preparation of dual action bactericides comprising
   oxazolidinone and quinolone or naphthyridinone moiety effective against
   multi-drug resistant bacteria)
98105-93-2P, 7-Chloro-1-(2,4-difluorophenyl)-6-fluoro-4-oxo-1,4-
dihydroquinoline-3-carboxylic acid
                                   98105-94-3P, 7-Chloro-1-(2,4-
difluorophenyl)-6-fluoro-4-oxo-1,4-dihydroquinoline-3-carboxylic acid
              510728-59-3P, 2-[4-[(5S)-5-[(Acetylamino)methyl]-2-
oxooxazolidin-3-yl]-2-fluorophenylcarbamoyl]piperazine-1,4-dicarboxylic
acid di-tert-butyl ester
                           510728-60-6P, 2-[4-[(5S)-5-
[(Acetylamino)methyl]-2-oxooxazolidin-3-yl]-2-
fluorophenylcarbamoyl]piperazine
                                   510728-62-8P, (3R)-3-[(2-Fluoro-4-
nitrophenyl)amino]pyrrolidine-1-carboxylic acid allyl ester
510728-63-9P, (3R)-3-[(2-Fluoro-4-nitrophenyl)amino]pyrrolidine-1-
carboxylic acid tert-butyl ester
                                   510728-64-0P, (3R)-3-
[Benzyloxycarbonyl (4-benzyloxycarbonylamino-2-
fluorophenyl)amino]pyrrolidine-1-carboxylic acid tert-butyl ester
510728-65-1P, (3R)-3-[Benzyloxycarbonyl[2-fluoro-4-((5R)-5-hydroxymethyl-2-
oxooxazolidin-3-yl)phenyl]amino]pyrrolidine-1-carboxylic acid tert-butyl
        510728-66-2P, (3R)-3-[[4-((5R)-5-Azidomethyl-2-oxooxazolidin-3-yl)-
2-fluorophenyl]benzyloxycarbonylamino]pyrrolidine-1-carboxylic acid
tert-butyl ester
                 510728-67-3P, (3R)-3-[[4-[(5S)-5-[(Acetylamino)methyl]-
2-oxooxazolidin-3-yl]-2-fluorophenyl]amino]pyrrolidine-1-carboxylic acid
                  510728-68-4P, N-[[(5S)-3-[3-Fluoro-4-((3R)-pyrrolidin-3-
tert-butyl ester
ylamino)phenyl]-2-oxooxazolidin-5-yl]methyl]acetamide
                                                        510728-70-8P,
7-Chloro-6-fluoro-1-(5-fluoropyridin-2-yl)-4-oxo-1,4-dihydroquinoline-3-
                             510728-71-9P, 7-Chloro-6-fluoro-1-(5-
carboxylic acid ethyl ester
fluoropyridin-2-yl)-4-oxo-1,4-dihydroquinoline-3-carboxylic acid
```

510728-72-0P, 7-Chloro-6-fluoro-1-(5-fluoropyridin-2-yl)-4-oxo-1,4-

```
dihydroquinoline-3-carboxylatoboron diacetate
                                                                      510728-74-2P,
7-Chloro-1-(2,4-difluorophenyl)-6-fluoro-4-oxo-1,4-dihydroquinoline-3-
                                           510728-76-4P, 1-Cyclopropyl-7-fluoro-8-
carboxylatoboron diacetate
methoxy-4-oxo-1,4-dihydroquinoline-3-carboxylatoboron diacetate
510728-78-6P, 9-[4-[4-[(5S)-5-[(Acetylamino)methyl]-2-oxooxazolidin-3-yl]-
2-fluorophenyl]piperazin-1-yl]-8-fluoro-3-methyl-6-oxo-2,3-dihydro-6H-1-
oxa-3,3a-diazaphenalene-5-carboxylic acid ethyl ester
                                                                                    510728-80-0P,
[(1,4-Dibenzylpiperazin-2-yl)methylene](ethyl)amine
                                                                                 510728-81-1P,
                                                                          510728-82-2P,
(1,4-Dibenzylpiperazin-2-ylmethyl) (ethyl) amine
[(1,4-Dibenzylpiperazin-2-yl)methyl]ethyl(2-fluoro-4-nitrophenyl)amine
510728-83-3P, [4-[(1,4-Dibenzylpiperazin-2-ylmethyl)(ethyl)amino]-3-
fluorophenyl]carbamic acid benzyl ester
                                                              510728-84-4P,
(5R) -3-[4-[(1,4-Dibenzylpiperazin-2-ylmethyl)(ethyl)amino]-3-fluorophenyl]-
5-hydroxymethyloxazolidin-2-one
                                                  510728-85-5P, Methanesulfonic acid
[(5R)-3-[4-[(1,4-Dibenzylpiperazin-2-ylmethyl)(ethyl)amino]-3-
fluorophenyl]-2-oxooxazolidin-5-yl]methyl ester
                                                                          510728-86-6P,
(5R)-5-Azidomethyl-3-[4-[(1,4-Dibenzylpiperazin-2-ylmethyl)(ethyl)amino]-3-
                                               510728-87-7P, N-[[(5S)-3-[4-[(1,4-
fluorophenyl]oxazolidin-2-one
Dibenzylpiperazin-2-ylmethyl) (ethyl) amino]-3-fluorophenyl]-2-oxooxazolidin-
5-yl]methyl]acetamide
                                    510728-88-8P, N-[[(5S)-3-[4-[(Piperazin-2-
ylmethyl) (ethyl) amino] -3-fluorophenyl] -2-oxooxazolidin-5-
                                 510728-90-2P, 4-[2-[4-[4-[(5S)-5-
yl]methyl]acetamide
[(Acetylamino)methyl]-2-oxooxazolidin-3-yl]-2-fluorophenyl]piperazin-1-
yl]ethyl]piperazine-1-carboxylic acid tert-butyl ester
N-[[(5S)-3-[3-Fluoro-4-[4-(2-(piperazin-1-yl)ethyl)piperazin-1-yl]phenyl]-
2-oxooxazolidin-5-yl]methyl]acetamide
                                                           510728-92-4P, 6,7-Difluoro-1-
cyclopropyl-4-oxo-1,4-dihydroquinoline-3-carboxylatoboron diacetate
510728-94-6P, 1-(1-Benzylpiperidin-4-yl)-4-(2-fluoro-4-
nitrophenyl) piperazine
                                    510728-95-7P, 4-[4-(4-Benzyloxycarbonylamino-2-
fluorophenyl)piperazin-1-yl]piperidine-1-carboxylic acid benzyl ester
510728-96-8P, 4-[4-[2-Fluoro-4-((5R)-5-hydroxymethyl-2-oxooxazolidin-3-
yl)phenyl]piperazin-1-yl]piperidin-1-carboxylic acid benzyl ester
510728-97-9P, 4-[4-[4-((5R)-5-Azidomethyl-2-oxooxazolidin-3-yl)-2-
fluorophenyl]piperazin-1-yl]piperidin-1-carboxylic acid benzyl ester
510728-98-0P, 4-[4-[4-[(5S)-5-[(Acetylamino)methyl]-2-oxooxazolidin-3-yl]-
2-fluorophenyl]piperazin-1-yl]piperidin-1-carboxylic acid benzyl ester
510728-99-1P, N-[[(5S)-3-[3-Fluoro-4-(4-(piperidin-4-yl)piperazin-1-
yl)phenyl]-2-oxooxazolidin-5-yl]methyl]acetamide
                                                                             510729-01-8P,
(4-Bromo-3-fluorophenyl)carbamic acid benzyl ester
                                                                                510729-02-9P,
3-(4-Benzyloxycarbonylamino-2-fluorophenyl)acrylic acid ethyl ester
510729-03-0P, (3R*,4S*)-1-Benzyl-4-(4-benzyloxycarbonylamino-2-
fluorophenyl)pyrrolidine-3-carboxylic acid ethyl ester
                                                                                     510729-04-1P,
[4-[(3S*,4R*)-1-Benzyl-4-hydroxymethylpyrrolidin-3-yl]-3-
fluorophenyl]carbamic acid benzyl ester
                                                               510729-05-2P,
[4-[(3S*,4R*)-4-Azidomethyl-1-benzylpyrrolidin-3-yl]-3-
fluorophenyl]carbamic acid benzyl ester
                                                              510729-06-3P,
[4-[(3S*,4R*)-1-Benzyl-4-[(tert-butoxycarbonylamino)methyl]pyrrolidin-3-
yl]-3-fluorophenyl]carbamic acid benzyl ester
                                                                        510729-07-4P,
 \begin{tabular}{l} [\ (3S*,4R*)-1-Benzyl-4-[2-fluoro-4-((5R)-5-hydroxymethyl-2-oxooxazolidin-3-hydroxymethyl-2-oxooxazolidin-3-hydroxymethyl-2-oxooxazolidin-3-hydroxymethyl-2-oxooxazolidin-3-hydroxymethyl-2-oxooxazolidin-3-hydroxymethyl-2-oxooxazolidin-3-hydroxymethyl-2-oxooxazolidin-3-hydroxymethyl-2-oxooxazolidin-3-hydroxymethyl-2-oxooxazolidin-3-hydroxymethyl-2-oxooxazolidin-3-hydroxymethyl-2-oxooxazolidin-3-hydroxymethyl-2-oxooxazolidin-3-hydroxymethyl-2-oxooxazolidin-3-hydroxymethyl-2-oxooxazolidin-3-hydroxymethyl-2-oxooxazolidin-3-hydroxymethyl-2-oxooxazolidin-3-hydroxymethyl-2-oxooxazolidin-3-hydroxymethyl-2-oxooxazolidin-3-hydroxymethyl-2-oxooxazolidin-3-hydroxymethyl-2-oxooxazolidin-3-hydroxymethyl-2-oxooxazolidin-3-hydroxymethyl-2-oxooxazolidin-3-hydroxymethyl-2-oxooxazolidin-3-hydroxymethyl-2-oxooxazolidin-3-hydroxymethyl-2-oxooxazolidin-3-hydroxymethyl-2-oxooxazolidin-3-hydroxymethyl-2-oxooxazolidin-3-hydroxymethyl-2-oxooxazolidin-3-hydroxymethyl-2-oxooxazolidin-3-hydroxymethyl-2-oxooxazolidin-3-hydroxymethyl-2-oxooxazolidin-3-hydroxymethyl-2-oxooxazolidin-3-hydroxymethyl-2-oxooxazolidin-3-hydroxymethyl-2-oxooxazolidin-3-hydroxymethyl-2-oxooxazolidin-3-hydroxymethyl-2-oxooxazolidin-3-hydroxymethyl-2-oxooxazolidin-3-hydroxymethyl-2-oxooxazolidin-3-hydroxymethyl-2-oxooxazolidin-3-hydroxymethyl-2-oxooxazolidin-3-hydroxymethyl-2-oxooxazolidin-3-hydroxymethyl-2-oxooxazolidin-3-hydroxymethyl-2-oxooxazolidin-3-hydroxymethyl-2-oxooxazolidin-3-hydroxymethyl-2-oxooxazolidin-3-hydroxymethyl-2-oxooxazolidin-3-hydroxymethyl-2-hydroxymethyl-2-hydroxymethyl-2-hydroxymethyl-2-hydroxymethyl-2-hydroxymethyl-2-hydroxymethyl-2-hydroxymethyl-2-hydroxymethyl-2-hydroxymethyl-2-hydroxymethyl-2-hydroxymethyl-2-hydroxymethyl-2-hydroxymethyl-2-hydroxymethyl-2-hydroxymethyl-2-hydroxymethyl-2-hydroxymethyl-2-hydroxymethyl-2-hydroxymethyl-2-hydroxymethyl-2-hydroxymethyl-2-hydroxymethyl-2-hydroxymethyl-2-hydroxymethyl-2-hydroxymethyl-2-hydroxymethyl-2-hydroxymethyl-2-hydroxymethyl-2-hydroxymethyl-2-hydroxymethyl-2-hydroxymethy
yl)phenyl]pyrrolidin-3-yl]methyl]carbamic acid tert-butyl ester
510729-08-5P, [[(3S*,4R*)-4-[4-[(5S)-5-[(Acetylamino)methyl]-2-
oxooxazolidin-3-yl]-2-fluorophenyl]-1-benzylpyrrolidin-3-
yl]methyl]carbamic acid tert-butyl ester
                                                                 510729-09-6P,
[[(3S*,4R*)-4-[4-[(5S)-5-[(Acetylamino)methyl]-2-oxooxazolidin-3-yl]-2-
fluorophenyl]pyrrolidin-3-yl]methyl]carbamic acid tert-butyl ester
510729-11-0P, 4-[2-[4-[4-[(5S)-5-[(Acetylamino)methyl]-2-
oxooxazolidin-3-yl]-2-fluorophenyl]piperazin-1-yl]-2-oxoethyl]piperazine-1-
carboxylic acid tert-butyl ester 510729-12-1P,
N-[[(5S)-3-[3-Fluoro-4-[4-(2-(piperazin-1-yl)acetyl)piperazin-1-yl]phenyl]-
2-oxooxazolidin-5-yl]methyl]acetamide 510729-14-3P, (1-
```

Benzhydrylazetidin-3-yl) (2-fluoro-4-nitrophenyl) amine 510729-15-4P, 3-[Benzyloxycarbonyl[4-(benzyloxycarbonylamino)-2fluorophenyl]amino]azetidine-1-carboxylic acid benzyl ester 510729-16-5P, 3-[Benzyloxycarbonyl[2-fluoro-4-((5R)-5-hydroxymethyl-2oxooxazolidin-3-yl)phenyl]amino]azetidine-1-carboxylic acid benzyl ester 510729-17-6P, 3-[[4-((5R)-5-Azidomethyl-2-oxooxazolidin-3-yl)-2fluorophenyl]benzyloxycarbonylamino]azetidine-1-carboxylic acid benzyl 510729-18-7P, 3-[[4-[(5S)-5-[(Acetylamino)methyl]-2-oxooxazolidin-3-yl]-2-fluorophenyl]benzyloxycarbonylamino]azetidine-1-carboxylic acid 510729-20-1P, N-[[(5S)-3-[4-(Azetidin-3-ylamino)-3fluorophenyl]-2-oxooxazolidin-5-yl]methyl]acetamide 510729-25-6P, (3S\*,4S\*)-1-Benzyl-4-[(tert-butoxycarbonylamino)methyl]pyrrolidine-3carboxylic acid ethyl ester 510729-29-0P, (3S\*,4S\*)-1-Benzyl-4-[(tertbutoxycarbonylamino)methyl]pyrrolidine-3-carboxylic acid 510729-31-4P, [[(3S\*,4S\*)-4-[4-[4-[(5S)-5-[(Acetylamino)methyl]-2-oxooxazolidin-3-yl]-2fluorophenyl]piperazine-1-carbonyl]-1-benzylpyrrolidin-3yl]methyl]carbamic acid tert-butyl ester 510729-33-6P, [[(3S\*,4S\*)-4-[4-[4-[(5S)-5-[(Acetylamino)methyl]-2-oxooxazolidin-3-yl]-2fluorophenyl]piperazine-1-carbonyl]pyrrolidin-3-yl]methyl]carbamic acid tert-butyl ester 510729-40-5P, 4-(5-(Benzyloxycarbonylamino)pyridin-2yl)piperazine-1-carboxylic acid tert-butyl ester 510729-43-8P, 4-[5-((5R)-5-Hydroxymethyl-2-oxooxazolidin-3-yl)pyridin-2-yl}piperazine-1carboxylic acid tert-butyl ester 510729-45-0P, 4-[5-((5R)-5-Azidomethyl-2-oxooxazolidin-3-yl)pyridin-2-yl]piperazine-1-carboxylic acid tert-butyl 510729-47-2P, 4-[5-[(5S)-5-[(Acetylamino)methyl]-2-oxooxazolidin-3yl]pyridin-2-yl]piperazine-1-carboxylic acid tert-butyl ester 510729-49-4P, N-[[(5S)-2-0xo-3-(6-(piperazin-1-y1)pyridin-3-y1)oxazolidin-5-yl]methyl]acetamide 510729-53-0P, (3R)-3-[4-(2-Fluoro-4nitrophenyl)piperazin-1-yl]pyrrolidine-1-carboxylic acid allyl ester 510729-54-1P, (3R)-3-[4-(2-Fluoro-4-nitrophenyl)piperazin-1-yl]pyrrolidine-1-carboxylic acid tert-butyl ester 510729-55-2P, (3R)-3-[4-[2-Fluoro-4-((5R)-5-hydroxymethyl-2-oxooxazolidin-3-yl)phenyl]piperazin-1yl]pyrrolidine-1-carboxylic acid tert-butyl ester 510729-56-3P, (3R)-3-[4-(4-Benzyloxycarbonylamino-2-fluorophenyl)piperazin-1yl]pyrrolidine-1-carboxylic acid tert-butyl ester 510729-57-4P, (3R) - 3 - [4 - [4 - ((5R) - 5 - Azidomethyl - 2 - oxooxazolidin - 3 - yl) - 2 fluorophenyl]piperazin-1-yl]pyrrolidine-1-carboxylic acid tert-butyl ester 510729-58-5P, (3R)-3-[4-[4-((5S)-5-[(Acetylamino)methyl]-2-oxooxazolidin-3yl)-2-fluorophenyl]piperazin-1-yl]pyrrolidine-1-carboxylic acid tert-butyl 510729-60-9P, N-[[(5S)-3-[3-Fluoro-4-[4-((3R)-pyrrolidin-3yl)piperazin-1-yl]phenyl]-2-oxooxazolidin-5-yl]methyl]acetamide 510729-62-1P, 4-[2-Fluoro-4-[(5R)-5-[(methanesulfonylamino)methyl]-2oxooxazolidin-3-yl]phenyl]piperazin-1-carboxylic acid tert-butyl ester 510729-63-2P, N-[[(5R)-3-(3-Fluoro-4-(piperazin-1-yl)phenyl)-2oxooxazolidin-5-yl]methyl]methanesulfonamide 510729-65-4P, (1-Benzylpiperidin-4-yl) (2-fluoro-4-nitrophenyl) amine 510729-66-5P, 2-Fluoro-N'-(piperidin-4-yl)benzene-1,4-diamine 510729-67-6P, 4-[(4-Benzyloxycarbonylamino-2-fluorophenyl)amino]piperidine-1-carboxylic 510729-68-7P, 4-[[2-Fluoro-4-((5R)-5-hydroxymethyl-2acid benzyl ester oxooxazolidin-3-yl)phenyl]amino]piperidine-1-carboxylic acid benzyl ester fluorophenyl]amino]piperidine-1-carboxylic acid benzyl ester 510729-70-1P, 4-[[4-((5S)-5-Aminomethyl-2-oxooxazolidin-3-yl)-2fluorophenyl]amino]piperidine-1-carboxylic acid benzyl ester 510729-71-2P, 4-[[4-[(5S)-5-[(Acetylamino)methyl]-2-oxooxazolidin-3-yl]-2fluorophenyl]amino]piperidine-1-carboxylic acid benzyl ester 510729-72-3P, N-[[(5S)-3-[3-Fluoro-4-(piperidin-4-ylamino)phenyl]-2oxooxazolidin-5-yl]methyl]acetamide 510729-75-6P, 4-[2-Fluoro-4-[(5S)-5-[[[(methylsulfanyl)thiocarbonyl]amino]methyl]-2-oxooxazolidin-3yl]phenyl]piperazine-1-carboxylic acid tert-butyl ester 510729-76-7p.

[[(5S)-3-(3-Fluoro-4-(piperazin-1-yl)phenyl)-2-oxooxazolidin-5-yl]methyl]dithiocarbamic acid methyl ester 510729-78-9P,
4-[2-Fluoro-4-((5S)-2-oxo-5-thioureidomethyloxazolidin-3-yl)phenyl]piperazine-1-carboxylic acid tert-butyl ester 510729-79-0P,
[[(5S)-3-(3-Fluoro-4-(piperazin-1-yl)phenyl)-2-oxooxazolidin-5-yl]methyl]thiourea 510729-83-6P, (S)-N-[[3-[3-Fluoro-4-(4-piperidinylsulfanyl)phenyl]-2-oxo-5-oxazolidinyl]methyl]acetamide
RL: RCT (Reactant); SPN (Synthetic preparation); PREP
(Preparation); RACT (Reactant or reagent)
 (preparation of dual action bactericides comprising oxazolidinone and quinolone or naphthyridinone moiety effective against multi-drug

resistant bacteria)

IT 510729-10-9P, 7-[4-[2-[4-[4-[(5S)-5-[(Acetylamino)methyl]-2-oxooxazolidin-3-yl]-2-fluorophenyl]piperazin-1-yl]-2-oxoethyl]piperazin-1-yl]-1-cyclopropyl-6-fluoro-4-oxo-1,4-dihydroquinoline-3-carboxylic acid RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(drug candidate; preparation of dual action bactericides comprising oxazolidinone and quinolone or naphthyridinone moiety effective against multi-drug resistant bacteria)

RN 510729-10-9 HCAPLUS

CN 3-Quinolinecarboxylic acid, 7-[4-[2-[4-[4-[(5S)-5-[(acetylamino)methyl]-2-oxo-3-oxazolidinyl]-2-fluorophenyl]-1-piperazinyl]-2-oxoethyl]-1-piperazinyl]-1-cyclopropyl-6-fluoro-1,4-dihydro-4-oxo- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A

⁻со₂н

IT 510729-11-0P, 4-[2-[4-[4-[(5S)-5-[(Acetylamino)methyl]-2oxooxazolidin-3-yl]-2-fluorophenyl]piperazin-1-yl]-2-oxoethyl]piperazine-1carboxylic acid tert-butyl ester 510729-12-1P, N-[[(5S)-3-[3-Fluoro-4-[4-(2-(piperazin-1-yl)acetyl)piperazin-1-yl]phenyl]-2-oxooxazolidin-5-yl]methyl]acetamide RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent) (preparation of dual action bactericides comprising oxazolidinone and quinolone or naphthyridinone moiety effective against multi-drug resistant bacteria) RN 510729-11-0 HCAPLUS CN 1-Piperazinecarboxylic acid, 4-[2-[4-[4-[(5S)-5-[(acetylamino)methyl]-2oxo-3-oxazolidinyl]-2-fluorophenyl]-1-piperazinyl]-2-oxoethyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 510729-12-1 HCAPLUS

CN Acetamide, N-[[(5S)-3-[3-fluoro-4-[4-(1-piperazinylacetyl)-1piperazinyl]phenyl]-2-oxo-5-oxazolidinyl]methyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

## RE.CNT 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

L37 ANSWER 10 OF 31 HCAPLUS COPYRIGHT 2006 ACS on STN

AN2003:301082 HCAPLUS

DN 138:304288

ΤI Preparation of dual action bactericides comprising a oxazolidinone and a quinolone or naphthyridinone moiety effective against multi-drug resistant

IN Hubschwerlen, Christian; Specklin, Jean-Luc

Morphochen Aktiengesellschaft fuer Kombinatorische Chemie, Germany PΑ

so PCT Int. Appl., 95 pp.

CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 1																					
	PATENT NO.					KIND DATE			APPLICATION NO.						DATE						
PΙ	WO 2003031441				A1 20030417				,	WO 2	002-		20020925								
		W:	ΑE,	AG,	AL,	AM,	AT,	AU,	ΑZ,	BA,	BB,	BG,	BR,	BY,	ΒZ,	CA,	CH,	CN,			
			CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	ES,	FI,	GB,	GD,	GE,	GH,			
			GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	KE,	KG,	KP,	KR,	ΚZ,	LC,	LK,	LR,			
			LS,	LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	MZ,	NO,	NZ,	OM,	PH,			
			PL,	PT,	RO,	RU,	SD,	SE,	SG,	SI,	SK,	SL,	ТJ,	TM,	TN,	TR,	TT,	TZ,			
			UA,	ŪĠ,	US,	UΖ,	VN,	YU,	ZA,	ZM,	ZW										
		RW:	GH,	GM,	ΚE,	LS,	MW,	MZ,	SD,	SL,	SZ,	TZ,	ŪĠ,	ZM,	ZW,	AM,	ΑZ,	BY,			
			KG,	ΚZ,	MD,	RU,	ТJ,	TM,	ΑT,	ΒE,	BG,	CH,	CY,	CZ,	DE,	DK,	EE,	ES,			
			FI,	FR,	GB,	GR,	ΙE,	IT,	LU,	MC,	NL,	PT,	SE,	ŠK,	TR,	BF,	ВJ,	CF,			
			CG,	CI,	CM,	GΑ,	GN,	GQ,	GW,	ML,	MR,	ΝE,	SN,	TD,	TG						
PRAI US 2001-327208P P								2001	1004												
OS MARPAT 138:304288																					

AB The present invention refers to novel multiple action compds., i.e., to compds. which contain at least two pharmaceutically active components in one mol. The compds. have a higher stability than corresponding compds. of the prior art. Although the present invention does not claim any specific compds. or even a Markush expression, the examples involve oxazolidinones having a quinolone or naphthyridinone moiety (shown as I; variables defined below; e.g. 7-[4-[4-[(5S)-5-(acetylaminomethyl)-2oxooxazolidin-3-yl]-2-fluorophenyl]piperazin-1-yl]-1-cyclopropyl-6-fluoro-4-oxo-1,4-dihydroquinoline-3-carboxylic acid (shown as II)) that are useful antibacterial agents and effective against a variety of multi-drug resistant bacteria. For I: A is a bond, NH, O, S, SO, SO2, SO2NH, PO4, -NH-CO-NH-, -CO-NH-, -CO-, -CO-O-, -NH-CO-O-, alkylene, alkenylene, alkynylene, heteroalkylene, arylene, heteroarylene, cycloalkylene, heterocycloalkylene, alkylarylene or heteroarylalkylene or a combination of two or more of these atoms or groups. X is CR5 or N; Y is CR6 or N; U is F or Cl; n = 0-3; R1 is H, F, Cl, Br, I, OH, NH2, alkyl or heteroalkyl; R2 is H, F or Cl; R3 is H, alkyl, alkenyl, alkynyl, heteroalkyl, cycloalkyl, heterocycloalkyl, aryl, heteroaryl, alkylaryl or heteroarylalkyl; R4 is heteroalkyl, cycloalkyl, heterocycloalkyl, aryl, heteroaryl, alkylaryl or heteroarylalkyl; R5 is H, F, Cl, OH, NH2, alkyl or heteroalkyl, or R3 and R5 can be linked via an alkylene, an alkenylene or heteroalkylene or be a part of a cycloalkylene or heterocycloalkylene group, in which case R3 is not H and R5 is not H, F, OH, NH2 or Cl; R6 is H, F, Cl or OMe. Although the methods of preparation are not claimed, 30 example prepns. are included. All examples were tested against several gram pos. and gram neg. bacteria; typical MIC ranges (mg/L) are: S. aureus (MRSA: 0.125-2; MSSA: 0.06-1), E. faecalis (≤0.03-1), E. faecium

```
(\leq 0.03-1), and S. pneumoniae (\leq 0.03-1). They all have a
    broader and more pronounced activity than the corresponding quinolone and
    oxazolidinone as well as a 1+1 combination of these two compds. The
     examples of this patent are the same as those of WO 03/031443 A1.
TC
     ICM C07D413-12
     ICS C07D498-04; C07D413-14; C07D471-04; A61K031-496; A61K031-5383;
         A61K031-4709; A61K031-5395; A61K031-4375; A61K031-4545; A61P031-04
     28-9 (Heterocyclic Compounds (More Than One Hetero Atom))
CC
    Section cross-reference(s): 1, 63
     444335-12-0P
                                  510728-57-1P
                                                 510728-58-2P
                                                               510728-61-7P
IT
                  484639-31-8P
    510728-69-5P
                 510728-73-1P
                                  510728-75-3P
                                                 510728-77-5P
                                                               510728-79-7P
                                  510729-00-7P 510729-10-9P
    510728-89-9P
                   510728-93-5P
    510729-13-2P 510729-22-3P
                                  510729-24-5P
                                                 510729-35-8P
                                                               510729-38-1P
    510729-51-8P 510729-52-9P
                                  510729-61-0P
                                                 510729-64-3P
                                                               510729-73-4P
    510729-74-5P
                   510729-77-8P 510729-80-3P 510729-81-4P
                                                               510729-82-5P
    510729-84-7P
    RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU
     (Therapeutic use); BIOL (Biological study); PREP (Preparation);
    USES (Uses)
        (drug candidate; preparation of dual action bactericides comprising
        oxazolidinone and quinolone or naphthyridinone moiety effective against
       multi-drug resistant bacteria)
ΙT
     98105-93-2P
                                510728-59-3P
                                               510728-60-6P
                                                              510728-62-8P
                  98105-94-3P
     510728-63-9P
                   510728-64-0P
                                  510728-65-1P
                                                 510728-66-2P
                                                               510728-67-3P
     510728-68-4P
                   510728-70-8P
                                  510728-71-9P
                                                 510728-72-0P
                                                               510728-74-2P
     510728-76-4P
                   510728-78-6P
                                  510728-80-0P
                                                 510728-81-1P
                                                               510728-82-2P
    510728-83-3P
                   510728-84-4P
                                  510728-85-5P
                                                 510728-86-6P
                                                               510728-87-7P
    510728-88-8P
                   510728-90-2P
                                  510728-91-3P
                                                 510728-92-4P
                                                               510728-94-6P
                   510728-96-8P
                                                 510728-98-0P
    510728-95-7P
                                  510728-97-9P
                                                               510728-99-1P
    510729-01-8P
                   510729-02-9P
                                  510729-03-0P
                                                 510729-04-1P
                                                               510729-05-2P
    510729-06-3P 510729-07-4P
                                  510729-08-5P
                                                 510729-09-6P
    510729-11-0P 510729-12-1P 510729-14-3P 510729-15-4P
    510729-16-5P 510729-17-6P
                                 510729-18-7P
                                                510729-20-1P
                                                               510729-25-6P
    510729-29-0P 510729-31-4P
                                  510729-33-6P
                                                510729-40-5P
                                                               510729-43-8P
    510729-45-0P 510729-47-2P
                                  510729-49-4P
                                                 510729-53-0P
                                                               510729-54-1P
    510729-55-2P 510729-56-3P
                                  510729-57-4P
                                                 510729-58-5P
                                                               510729-60-9P
    510729-62-1P 510729-63-2P
                                  510729-65-4P
                                                 510729-66-5P
                                                               510729-67-6P
    510729-68-7P
                   510729-69-8P
                                  510729-70-1P
                                                 510729-71-2P
                                                               510729-72-3P
    510729-75-6P
                   510729-76-7P
                                  510729-78-9P
                                                 510729-79-0P
                                                               510729-83-6P
    RL: RCT (Reactant); SPN (Synthetic preparation); PREP
     (Preparation); RACT (Reactant or reagent)
        (preparation of dual action bactericides comprising oxazolidinone and
       quinolone or naphthyridinone moiety effective against multi-drug
       resistant bacteria)
IT
    510729-10-9P
    RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU
     (Therapeutic use); BIOL (Biological study); PREP (Preparation);
    USES (Uses)
        (drug candidate; preparation of dual action bactericides comprising
       oxazolidinone and quinolone or naphthyridinone moiety effective against
       multi-drug resistant bacteria)
RN
    510729-10-9 HCAPLUS
CN
    3-Quinolinecarboxylic acid, 7-[4-[2-[4-[4-[(5S)-5-[(acetylamino)methyl]-2-
    oxo-3-oxazolidinyl]-2-fluorophenyl]-1-piperazinyl]-2-oxoethyl]-1-
    piperazinyl]-1-cyclopropyl-6-fluoro-1,4-dihydro-4-oxo- (9CI) (CA INDEX
```

Absolute stereochemistry.

NAME)

PAGE 1-B

CO2H

Absolute stereochemistry.

RN 510729-12-1 HCAPLUS

CN Acetamide, N-[[(5S)-3-[3-fluoro-4-[4-(1-piperazinylacetyl)-1-piperazinyl]phenyl]-2-oxo-5-oxazolidinyl]methyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

## RE.CNT 9 THERE ARE 9 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

L37 ANSWER 11 OF 31 HCAPLUS COPYRIGHT 2006 ACS on STN

AN 2003:76763 HCAPLUS

DN 138:137295

TI Phenyl-substituted isoxazoles and the use thereof as antibiotics and antitumor agents

IN Farrerons Gallemi, Carles; Lagunas Arnal, Carmen; Fernandez, Serrat Anna; Catena Ruiz, Juan Lorenzo; Miquel Bono, Ignacio Jose; Balsa Lopez, Dolors; Salcedo Roca, Carolina; Toledo Mesa, Natividad; Fernandez Garcia, Andres PA Laboratorios S.A.L.V.A.T., S.A., Spain

SO PCT Int. Appl., 72 pp.

CODEN: PIXXD2

DT Patent

LA Spanish

FAN.CNT 1

FAN.CNT 1																			
PATENT NO.													DATE						
ΡI					A1 20030130									20020717					
		W:	ΑE,	AG,	AL,	AM,	ΑT,	AT, AU, AZ,		BA,	BB,	BG,	BR,	BY,	ΒZ,	CA,	CH,	CN,	
			CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	ĒE,	ES,	FI,	GB,	GD,	GE,	GH,	
			GM,	HR,	ΗU,	ID,	ΙL,	IN,	IS,	JP,	ΚE,	KG,	KΡ,	KR,	ΚZ,	LC,	LK,	LR,	
			LS,	LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	ΜZ,	NO,	ΝZ,	OM,	PH,	
			PL,	PT,	RO,	RU,	SD,	SE,	SG,	SI,	SK,	SL,	ТJ,	TM,	TN,	TR,	TT,	TZ,	
			UA,	UG,	US,	UZ,	VN,	YU,	ZA,	ZM,	ZW								
		RW:	GH,	GM,	KE,	LS,	MW,	MZ,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	AT,	BE,	BG,	
			CH,	CY,	CZ,	DE,	DK,	EE,	ES,	FI,	FR,	GB,	GR,	IE,	IT,	LU,	MC,	NL,	
			-									CM,							
			NE,	SN,	TD,	TG	•	•	•			•		•		-	-	•	
	ES	2180	456	-	•	A1		2003	0201		ES 2	001-		20010720					
								20030201 ES 2001-1793 20010720 20040501											
	CA	2453	846			AA		2003	0130		CA 2	002-	2453		20020717				
															20020717				
														20020717					
												IT,							
																	,	,	
	CN	1556	•	•	•	•	•	•	•	•	CY, AL, TR, BG, CZ, CN 2002-818517				•				
		2005								JP 2003-513955									
										US 2004-484027									
ррат											05 2		4040.	2,		21	1040	720	
FIGI						A 20010720 7 20020717													
os		RPAT				**		2002	0,1,										
	M	CPA1	130:	13/2	73														
GI																			

The invention relates to title compds. I [wherein: X is O, S, NH, OCO, AB NHCO, NHCOO, NHCONH, NHCS, or NHCSNH; R1 and R3 are H or F; R2 is a selected (un) substituted (primarily N-bound) heterocyclic radical; R4 is H, C1-3 alkyl (un) substituted by 1-3 halogens, or a member of selected (un) substituted 5- or 6-membered heterocycles]. The invention includes stereoisomers, mixts., polymorphs, N-oxides, solvates, and/or pharmaceutically acceptable addition salts. I can be used to treat microbial infections or (pre) cancerous pathologies in humans or animals. As analogs of similar isoxazolidine derivs., I are of interest due to the absence of chirality in the isoxazole ring. Approx. 35 examples of I were prepared and tested. For instance, invention compound II was prepared by a 6-step sequence: (1) N-protection of 3-aminoisoxazole with Boc20 (69%), (2) N-alkylation of the Boc-protected amine with NaH and 3-(3,4difluorophenyl)isoxazole-5-Me methylsulfonate (88%), (3) removal of Boc with H2SO4 in dioxane (79%), (4) aminolysis of 4-fluoro with piperazine and K2CO3 (42%), (5) N-acylation of the piperazine moiety with AcOCH2COCl (88%), and (6) methanolysis of the acetate ester with K2CO3 in MeOH (73%). In tests against strains of Streptococcus faecalis, Staphylococcus aureus, and Moraxella catarrhalis, II had MIC values of 4, 2, and 8 µg/mL, resp., which was comparable to the known, structurally similar antibiotics linezolid (4, 2, 4) and eperezolid (4, 2, 8). Other compds. I showed similar or even higher potency. Several I had antitumor activity comparable to exisulind against 2 lines of human colon adenocarcinoma, HT-29 and HCT-116. IC ICM C07D261-08 ICS A61K031-42; A61P031-00; A61P035-00 CC 28-6 (Heterocyclic Compounds (More Than One Hetero Atom)) Section cross-reference(s): 1, 10 IT 492992-10-6P, 3-[3-Fluoro-4-[4-(hydroxyacetyl)piperazin-1-yl]phenyl]-5-[[(isoxazol-3-yl)amino]methyl]isoxazole 492992-11-7P, 3-[3-Fluoro-4-(imidazol-1-yl)phenyl]-5-[[(isoxazol-3yl)amino]methyl]isoxazole 492992-12-8P, 3-[3-Fluoro-4-[4-(5isoxazolylcarbonyl)piperazin-1-yl]phenyl]-5-[[(isoxazol-3-492992-13-9P, 3-[3-Fluoro-4-[4yl)amino]methyl]isoxazole (hydroxymethyl)imidazol-1-yl]phenyl]-5-[[(isoxazol-3yl)amino]methyl]isoxazole 492992-14-0P, 1-[2-Fluoro-4-[5-[[(isoxazol-3yl)amino]methyl]isoxazol-3-yl]phenyl]-1H-pyrrole-3-carboxaldehyde **492992-15-1P**, 3-[3-Fluoro-4-[4-[(1-pyrazolyl)acetyl]piperazin-1yl]phenyl]-5-[[(isoxazol-3-yl)amino]methyl]isoxazole 492992-16-2P , 1-[4-[2-Fluoro-4-[5-[[(isoxazol-3-yl)amino]methyl]isoxazol-3yl]phenyl]piperazin-1-yl]-2-phenoxyethanone 492992-17-3P, 3-[3-Fluoro-4-[4-[(1,2,4-triazol-1-yl)acetyl]piperazin-1-yl]phenyl]-5-[[(isoxazol-3-yl)amino]methyl]isoxazole 492992-18-4P, 3-[3-Fluoro-4-[4-(3-pyridylcarbonyl)piperazin-1-yl]phenyl]-5-[[(isoxazol-3yl)amino]methyl]isoxazole 492992-19-5P, 3-[3-Fluoro-4-[4-[(1pyrrolyl)acetyl]piperazin-1-yl]phenyl]-5-[[(isoxazol-3yl)amino]methyl]isoxazole 492992-20-8P, 3-[3-Fluoro-4-[4-[[(3pyridyl)oxy]acetyl]piperazin-1-yl]phenyl]-5-[[(isoxazol-3yl)amino]methyl]isoxazole 492992-21-9P, 3-[3-Fluoro-4-[4-(2pyridyloxyacetyl)piperazin-1-yl]phenyl]-5-[[(isoxazol-3yl)amino]methyl]isoxazole 492992-22-0P, 3-[3-Fluoro-4-[4-(3nitrophenyloxyacetyl)piperazin-1-yl]phenyl]-5-[[(isoxazol-3yl)amino]methyl]isoxazole 492992-23-1P, 3-[3-Fluoro-4-[4-(4nitrophenyloxyacetyl)piperazin-1-yl]phenyl]-5-[[(isoxazol-3-492992-24-2P, 3-[3-Fluoro-4-[4-(2yl)amino]methyl]isoxazole furylmethoxyacetyl)piperazin-1-yl]phenyl]-5-[[(isoxazol-3yl)amino]methyl]isoxazole 492992-25-3P, 3-[3-Fluoro-4-[4-(2pyridylmethoxyacetyl)piperazin-1-yl]phenyl]-5-[[(isoxazol-3yl)amino]methyl]isoxazole 492992-26-4P, 3-[3-Fluoro-4-[4-(4cyanophenoxyacetyl)piperazin-1-yl]phenyl]-5-[[(isoxazol-3-

TT

```
vl)aminolmethyllisoxazole
                           492992-27-5P, 3-[3-Fluoro-4-[4-(2-propyn-1-
yloxyacetyl)piperazin-1-yl]phenyl]-5-[[(isoxazol-3-
yl)amino]methyl]isoxazole 492992-28-6P, 3-[3-Fluoro-4-[4-(4-
formylphenyloxyacetyl)piperazin-1-yl]phenyl]-5-[[(isoxazol-3-
yl)amino]methyl]isoxazole
                            492992-29-7P, 3-[3-Fluoro-4-(imidazol-1-
yl)phenyl]-5-(N-acetylaminomethyl)isoxazole
                                             492992-30-0P,
3-[3-Fluoro-4-(imidazol-1-yl)phenyl]-5-[[N-(thioacetyl)amino]methyl]isoxaz
      492992-31-1P, 1-[4-[2-Fluoro-4-[5-[[(isoxazol-3-
yl) amino] methyl] isoxazol-3-yl] phenyl] piperazin-1-yl] -2-(quinolin-6-
yloxy) ethanone
                 492992-32-2P, [1-[2-Fluoro-4-[5-[[(isoxazol-3-
yl)amino]methyl]isoxazol-3-yl]phenyl]-1H-pyrrol-3-yl]methanol
492992-33-3P, 1-[2-Fluoro-4-[5-[[(isoxazol-3-yl)amino]methyl]isoxazol-3-
yl]phenyl]-1H-pyrrole-3-carboxaldehyde oxime
                                              492992-34-4P,
1-[2-Fluoro-4-[5-[[(isoxazol-3-yl)amino]methyl]isoxazol-3-yl]phenyl]-1H-
pyrrole-3-carbonitrile 492992-35-5P,
4-[2-(4-[2,6-Difluoro-4-[5-[[(isoxazol-3-yl)amino]methyl]isoxazol-3-
yl]phenyl]piperazin-1-yl)-2-oxoethoxy]benzaldehyde
                                                    492992-36-6P,
1-[2-Fluoro-4-[5-[[(isoxazol-3-yl)amino]methyl]isoxazol-3-yl]phenyl]-1H-
imidazole-4-carboxaldehyde 492992-37-7P, 3-[1-[2-Fluoro-4-[5-[[(isoxazol-
3-yl)amino]methyl]isoxazol-3-yl]phenyl]-1H-imidazol-4-yl]acrylonitrile
492992-38-8P, [[3-[3-Fluoro-4-[4-[[(2-methoxyphenyl)amino]methyl]imidazol-
1-yl]phenyl]isoxazol-5-yl]methyl](isoxazol-3-yl)amine 492992-39-9P,
[[3-[3-Fluoro-4-[3-[(o-tolylamino)methyl]pyrrol-1-yl]phenyl]isoxazol-5-
yl]methyl](isoxazol-3-yl)amine 492992-40-2P,
4-[2-(4-[2,6-Difluoro-4-[5-[[(isoxazol-3-yl)amino]methyl]isoxazol-3-
yl]phenyl]piperazin-1-yl]-2-oxoethoxy]benzaldoxime
                                                     492992-41-3P,
[[3-[3-Fluoro-4-(imidazol-1-yl)phenyl]isoxazol-5-yl]methyl](3-
methylisothiazol-5-yl)amine
                             492992-42-4P, 1-[2-Fluoro-4-[5-[[(3-
methylisothiazol-5-yl)amino]methyl]isoxazol-3-yl]phenyl]-1H-imidazole-4-
carboxaldehyde
                492992-43-5P, [[3-[3-Fluoro-4-(4-methylimidazol-1-
yl)phenyl]isoxazol-5-yl]methyl](3-methylisothiazol-5-yl)amine
492992-44-6P, 1-[2-Fluoro-4-[5-[((isoxazol-3-yl)oxy]methyl]isoxazol-3-
yl]phenyl]-1H-imidazole-4-carboxaldehyde
                                           492992-45-7P,
3-[1-[2-Fluoro-4-[5-[[(isoxazol-3-yl)amino]methyl]isoxazol-3-yl]phenyl]-1H-
pyrrol-3-yl]acrylonitrile
                            492992-46-8P, 3-[1-[2-Fluoro-4-[5-[[(3-
methylisothiazol-5-yl)amino]methyl]isoxazol-3-yl]phenyl]-1H-pyrrol-3-
yl]acrylonitrile
                   492992-47-9P, 3-[3-Fluoro-4-(4-methylimidazol-1-
yl)phenyl]-5-[[(isoxazol-3-yl)amino]methyl]isoxazole
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU
(Therapeutic use); BIOL (Biological study); PREP (Preparation);
USES (Uses)
   (drug candidate; preparation of phenylisoxazoles as antibiotics and
   antitumor agents)
492992-15-1P, 3-[3-Fluoro-4-[4-[(1-pyrazolyl)acetyl]piperazin-1-
yl]phenyl]-5-[[(isoxazol-3-yl)amino]methyl]isoxazole 492992-16-2P
, 1-[4-[2-Fluoro-4-[5-[[(isoxazol-3-yl)amino]methyl]isoxazol-3-
yl]phenyl]piperazin-1-yl]-2-phenoxyethanone 492992-17-3P,
3-[3-Fluoro-4-[4-[(1,2,4-triazol-1-yl)acetyl]piperazin-1-yl]phenyl]-5-
[[(isoxazol-3-yl)amino]methyl]isoxazole 492992-19-5P,
3-[3-Fluoro-4-[4-[(1-pyrrolyl)acetyl]piperazin-1-yl]phenyl]-5-[[(isoxazol-
3-yl)amino]methyl]isoxazole 492992-22-0P, 3-[3-Fluoro-4-[4-(3-
nitrophenyloxyacetyl)piperazin-1-yl]phenyl]-5-[[(isoxazol-3-
yl)amino]methyl]isoxazole 492992-23-1P, 3-[3-Fluoro-4-[4-(4-
nitrophenyloxyacetyl)piperazin-1-yl]phenyl]-5-[[(isoxazol-3-
yl)amino]methyl]isoxazole 492992-26-4P, 3-[3-Fluoro-4-[4-(4-
cyanophenoxyacetyl)piperazin-1-yl]phenyl]-5-{{(isoxazol-3-
yl)amino]methyl]isoxazole 492992-28-6P, 3-[3-Fluoro-4-[4-(4-
formylphenyloxyacetyl)piperazin-1-yl]phenyl]-5-[[(isoxazol-3-
yl)amino]methyl]isoxazole 492992-35-5P, 4-[2-(4-[2,6-Difluoro-4-
[5-[[(isoxazol-3-yl)amino]methyl]isoxazol-3-yl]phenyl]piperazin-1-yl)-2-
```

oxoethoxy]benzaldehyde 492992-40-2P, 4-[2-(4-[2,6-Difluoro-4-[5-[(isoxazol-3-yl)amino]methyl]isoxazol-3-yl]phenyl]piperazin-1-yl]-2-oxoethoxy]benzaldoxime

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(drug candidate; preparation of phenylisoxazoles as antibiotics and antitumor agents)

RN 492992-15-1 HCAPLUS

CN Piperazine, 1-[2-fluoro-4-[5-[(3-isoxazolylamino)methyl]-3-isoxazolyl]phenyl]-4-(1H-pyrazol-1-ylacetyl)- (9CI) (CA INDEX NAME)

RN 492992-16-2 HCAPLUS

CN Piperazine, 1-[2-fluoro-4-[5-[(3-isoxazolylamino)methyl]-3-isoxazolyl]phenyl]-4-(phenoxyacetyl)- (9CI) (CA INDEX NAME)

RN 492992-17-3 HCAPLUS

CN Piperazine, 1-[2-fluoro-4-[5-[(3-isoxazolylamino)methyl]-3-isoxazolyl]phenyl]-4-(1H-1,2,4-triazol-1-ylacetyl)- (9CI) (CA INDEX NAME)

RN 492992-19-5 HCAPLUS
CN Piperazine, 1-[2-fluoro-4-[5-[(3-isoxazolylamino)methyl]-3isoxazolyl]phenyl]-4-(1H-pyrrol-1-ylacetyl)- (9CI) (CA INDEX NAME)

RN 492992-22-0 HCAPLUS
CN Piperazine, 1-[2-fluoro-4-[5-[(3-isoxazolylamino)methyl]-3-isoxazolyl]phenyl]-4-[(3-nitrophenoxy)acetyl]- (9CI) (CA INDEX NAME)

RN 492992-23-1 HCAPLUS

SACKEY 10/717237 06/05/2006

Page 71

CN Piperazine, 1-[2-fluoro-4-[5-[(3-isoxazolylamino)methyl]-3-isoxazolyl]phenyl]-4-[(4-nitrophenoxy)acetyl]- (9CI) (CA INDEX NAME)

RN 492992-26-4 HCAPLUS

CN Piperazine, 1-[(4-cyanophenoxy)acetyl]-4-[2-fluoro-4-[5-[(3-isoxazolylamino)methyl]-3-isoxazolyl]phenyl]- (9CI) (CA INDEX NAME)

RN 492992-28-6 HCAPLUS

CN Piperazine, 1-[2-fluoro-4-[5-[(3-isoxazolylamino)methyl]-3-isoxazolyl]phenyl]-4-[(4-formylphenoxy)acetyl]- (9CI) (CA INDEX NAME)

RN 492992-35-5 HCAPLUS
CN Piperazine, 1-[2,6-difluoro-4-[5-[(3-isoxazolylamino)methyl]-3-isoxazolyl]phenyl]-4-[(4-formylphenoxy)acetyl]- (9CI) (CA INDEX NAME)

RN 492992-40-2 HCAPLUS
CN Piperazine, 1-[2,6-difluoro-4-[5-[(3-isoxazolylamino)methyl]-3isoxazolyl]phenyl]-4-[[4-[(hydroxyimino)methyl]phenoxy]acetyl]- (9CI) (CA
INDEX NAME)

## RE.CNT 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

L37 ANSWER 12 OF 31 HCAPLUS COPYRIGHT 2006 ACS on STN

AN 2002:736895 HCAPLUS

DN 137:247686

TI Preparation of oxazolidinone thioamides with piperazine amide substituents for pharmaceutical use in the treatment of microbial infections

IN Hester, Jackson B.

PA Pharmacia and Upjohn Co., USA

SO U.S. Pat. Appl. Publ., 22 pp., Cont.-in-part of U.S. Ser. No. 778,603, abandoned.

CODEN: USXXCO DT Patent

LA English

FAN.CNT 2

L MIN	CNIZ						
	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE		
ΡI	US 2002137754	A1	20020926	US 2002-42916	20020109		
	US 6642238	B2	20031104				
	US 2001047004	<b>A1</b>	20011129	US 2001-778603	20010207		
PRA]	US 2000-181640P	P	20000210				
	US 2001-778603	B2	20010207				
os	MARPAT 137:247686						
GI							

AB Oxazolidinone thioamides, such as I [R1 = H, NH2, alkylamino, alkenyl, alkyloxy, alkylthio, cycloalkyl, alkyl; R2, R3 = H, F, Cl, alkyl; R4 = CN, acyl, thioacyl, alkyloxyacyl, sulfonylmethylacyl, etc.] which have potent activities against gram-pos. and gram-neg. bacteria, were prepared for therapeutic use in the treatment of bacterial infections particularly of the skin and eye. Thus, PNU 255889 (II) was prepared via a multistep synthetic sequence which included N-acylation of III with MeSCH2CO2H, S-oxidation with sodium periodate, conversion of the phthalimido group to NH2 and N-thioacylation with MeCH2CS2Me. The prepared oxazolidinone thioamides were evaluated for min. inhibitory concns. of antibacterial activity against bacterial strains such as Staphylococcus aureus, S. epidermidis, Streptococcus pneumoniae, Enterococcus faecalis Moraxella catarrhalis and H. influenzae. Pharmaceutical formulations for oral, topical, transdermal, and parenteral delivery were discussed.

IC ICM A61K031-496

ICS C07D413-02; C07D045-02

INCL 514254020

CC 28-6 (Heterocyclic Compounds (More Than One Hetero Atom)) Section cross-reference(s): 1, 10, 63

IT 345224-19-3P 354578-45-3P 354578-46-4P 354578-47-5P 354578-48-6P 354578-49-7P 354578-50-0P 354578-51-1P 354578-52-2P 354578-53-3P 354578-54-4P 354578-55-5P 354578-56-6P 354578-61-3P 354578-62-4P

354578-65-7P 354578-66-8P **354578-67-9P** 354578-68-0P

RL: PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)

(preparation of oxazolidinone thioamides with piperazine amide substituents for pharmaceutical use in the treatment of microbial infections)

IT 354578-63-5P **354578-64-6P** 354819-74-2P 354819-77-5P 354819-82-2P 354819-83-3P 354819-85-5P 354819-86-6

354819-82-2P 354819-83-3P 354819-85-5P 354819-86-6P 354819-87-7P 354819-94-6P 354819-96-8P 354820-02-3P 354820-03-4P 354820-05-6P

354820-07-8P **354987-17-0P** 354987-18-1P 354987-21-6P

354987-23-8P 354987-24-9P 354987-25-0P 354987-26-1P 354987-30-7P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU

(Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of oxazolidinone thioamides with piperazine amide substituents for pharmaceutical use in the treatment of microbial infections)

IT 10303-88-5P 27912-85-2P 93652-31-4P 345224-18-2P

354578-57-7P 354578-58-8P 354578-59-9P 354578-60-2P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP

(Preparation); RACT (Reactant or reagent)

(preparation of oxazolidinone thioamides with piperazine amide substituents for pharmaceutical use in the treatment of microbial infections)

IT 354578-67-9P

RL: PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)

(preparation of oxazolidinone thioamides with piperazine amide substituents for pharmaceutical use in the treatment of microbial infections)

RN 354578-67-9 HCAPLUS

CN Carbamic acid, [[(5S)-3-[3-fluoro-4-[4-(phenoxyacetyl)-1-piperazinyl]phenyl]-2-oxo-5-oxazolidinyl]methyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

#### IT 354578-64-6P 354987-17-0P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of oxazolidinone thioamides with piperazine amide substituents for pharmaceutical use in the treatment of microbial infections)

RN 354578-64-6 HCAPLUS

N Carbamic acid, [[(5S)-3-[3-fluoro-4-[4-[1-oxo-3-(phenylmethoxy)propyl]-1piperazinyl]phenyl]-2-oxo-5-oxazolidinyl]methyl]-, 1,1-dimethylethyl ester
(9CI) (CA INDEX NAME)

RN 354987-17-0 HCAPLUS

CN Propanethioamide, N-[[(5S)-3-[3-fluoro-4-[4-(phenoxyacetyl)-1-piperazinyl]phenyl]-2-oxo-5-oxazolidinyl]methyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

IT 345224-18-2P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation of oxazolidinone thioamides with piperazine amide substituents for pharmaceutical use in the treatment of microbial infections)

RN 345224-18-2 HCAPLUS

SACKEY 10/717237 06/05/2006

CN Carbamic acid, [[(5S)-3-[3-fluoro-4-[4-[(phenylmethoxy)acetyl]-1 piperazinyl]phenyl]-2-oxo-5-oxazolidinyl]methyl]-, 1,1-dimethylethyl ester
 (9CI) (CA INDEX NAME)

Page 77

Absolute stereochemistry.

```
L37
    ANSWER 13 OF 31 HCAPLUS COPYRIGHT 2006 ACS on STN
AN
     2002:539929 HCAPLUS
DN
     137:106476
TI
     Oxazolidinone photoaffinity probes, uses and compounds
IN
     Colca, Jerry R.; McDonald, William Gerald; Shinabarger, Dean L.
PA
     Pharmacia & Upjohn Company, USA
     PCT Int. Appl., 48 pp.
so
     CODEN: PIXXD2
     Patent
DT
LA English
FAN.CNT 1
     PATENT NO.
                         KIND
                                DATE
                                            APPLICATION NO.
                                                                    DATE
ΡI
     WO 2002056013
                          A2
                                20020718
                                            WO 2001-US48455
                                                                    20011214
     WO 2002056013
                                20031106
                          Α3
            AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
             CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,
             GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,
             LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH,
             PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ,
             UA, UG, US, UZ, VN, YU, ZA, ZM, ZW
         RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY,
             KG, KZ, MD, RU, TJ, TM, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB,
             GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA,
             GN, GQ, GW, ML, MR, NE, SN, TD, TG
     CA 2432162
                          AA
                                20020718
                                            CA 2001-2432162
                                                                    20011214
     EP 1386153
                          A2
                                20040204
                                            EP 2001-993282
                                                                    20011214
```

IE, SI, LT, LV, FI, RO, MK, CY, AL, TR

AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,

```
JP 2002-556217
                                                                   20011214
     JP 2004537265
                          T2
                                20041216
PRAI US 2000-256053P
                          P·
                                20001215
     WO 2001-US48455
                          W
                                20011214
os
     MARPAT 137:106476
AB
     Disclosed are novel methods of identifying biol. targets of compds. that
     have antimicrobial activity. Also disclosed are novel methods of
     identifying compds. that can have antimicrobial activity.
IC
     ICM G01N033-53
CC
     10-5 (Microbial, Algal, and Fungal Biochemistry)
IT
     437717-86-7P
                    437717-87-8P 437717-88-9P 437717-89-0P
     437717-90-3P
                    437717-91-4P
                                   437717-92-5P
                                                 437717-93-6P
                                                                 437717-94-7P
     437717-95-8P
                    437717-96-9P
     RL: BSU (Biological study, unclassified); IMF (Industrial manufacture);
     PRP (Properties); PUR (Purification or recovery); SPN (Synthetic
     preparation); BIOL (Biological study); PREP (Preparation)
        (oxazolidinone photoaffinity probes, uses and compds.)
IT
     437717-97-0P
                   437717-98-1P 437717-99-2P
     437718-00-8P
                    437718-01-9P
                                  437718-02-0P
                                                  437718-03-1P
                   437718-05-3P
     437718-04-2P
                                   437718-07-5P
                                                  437718-08-6P
                                                                 437718-11-1P
     437718-12-2P
                    437718-14-4P
                                   442844-61-3P 442844-62-4P
                                                                 442844-63-5P
     442844-64-6P
                    442844-65-7P
                                   442844-66-8P
                                                  442844-67-9P
     RL: RCT (Reactant); SPN (Synthetic preparation); PREP
     (Preparation); RACT (Reactant or reagent)
        (oxazolidinone photoaffinity probes, uses and compds.)
TT
     437717-86-7P 437717-88-9P
     RL: BSU (Biological study, unclassified); IMF (Industrial manufacture);
     PRP (Properties); PUR (Purification or recovery); SPN (Synthetic
     preparation); BIOL (Biological study); PREP (Preparation)
        (oxazolidinone photoaffinity probes, uses and compds.)
RN
     437717-86-7 HCAPLUS
     Benzoic acid, 4-azido-2-hydroxy-5-(iodo-125I)-, 2-[4-[4-[(5S)-5-
CN
     [(acetylamino)methyl]-2-oxo-3-oxazolidinyl]-2-fluorophenyl]-1-piperazinyl]-
     2-oxoethyl ester (9CI) (CA INDEX NAME)
```

SACKEY 10/717237 06/05/2006

RN 437717-88-9 HCAPLUS

CN Benzoic acid, 4-azido-3-(iodo-125I)-, 2-[4-[4-[(5S)-5-[(acetylamino)methyl]-2-oxo-3-oxazolidinyl]-2-fluorophenyl]-1-piperazinyl]-2-oxoethyl ester (9CI) (CA INDEX NAME)

Page 79

Absolute stereochemistry.

Absolute stereochemistry.

(CA INDEX NAME)

RN 437717-99-2 HCAPLUS

CN Benzoic acid, 4-azido-3-iodo-, 2-[4-[4-[(5S)-5-[(acetylamino)methyl]-2-oxo-3-oxazolidinyl]-2-fluorophenyl]-1-piperazinyl]-2-oxoethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 437718-00-8 HCAPLUS

CN Benzoic acid, 4-azido-3-(trimethylstannyl)-, 2-[4-[4-[(5S)-5-[(acetylamino)methyl]-2-oxo-3-oxazolidinyl]-2-fluorophenyl]-1-piperazinyl]-2-oxoethyl ester (9CI) (CA INDEX NAME)

```
L37 ANSWER 14 OF 31 HCAPLUS COPYRIGHT 2006 ACS on STN
AN
     2002:465999 HCAPLUS
DN
     137:33287
TI
     Preparation of oxazolidinone photoaffinity probes
IN
     Thomasco, Lisa Marie; Gadwood, Robert C.
     Pharmacia & Upjohn Company, USA
PA
SO
     PCT Int. Appl., 41 pp.
     CODEN: PIXXD2
DT
     Patent
     English
LA
FAN.CNT 1
     PATENT NO.
                         KIND
                                DATE
                                            APPLICATION NO.
                                                                    DATE
                         _ _ _ _
PΙ
     WO 2002048139
                         A2
                                20020620
                                             WO 2001-US48063
                                                                    20011214
     WO 2002048139
                         A3
                                20031002
            AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
             CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,
             GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,
             LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH,
             PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ,
             UA, UG, US, UZ, VN, YU, ZA, ZM, ZW
         RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY,
             KG, KZ, MD, RU, TJ, TM, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB,
             GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA,
             GN, GQ, GW, ML, MR, NE, SN, TD, TG
     US 2003073696
                          A1
                                20030417
                                            US 2000-738022
                                                                    20001215
    US 6861433
                          B2
                                20050301
     CA 2432739
                          AA
                                20020620
                                            CA 2001-2432739
                                                                    20011214
    AU 2002034016
                          A5
                                20020624
                                            AU 2002-34016
                                                                    20011214
    EP 1368326
                         A2
                                20031210
                                            EP 2001-985023
                                                                    20011214
         R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
             IE, SI, LT, LV, FI, RO, MK, CY, AL, TR
```

```
SACKEY 10/717237 06/05/2006
                                   Page 82
                                20040708
                                            JP 2002-549670
                                                                    20011214
     JP 2004520298
     US 2003232840
                                20031218
                                            US 2003-359766
                                                                    20030206
                          A1
                              20050222
    US 6858635
                          B2
                                            US 2003-359767
                                                                    20030206
     US 2003232008
                          A1
                                20031218
    US 6875871
                          B2
                                20050405
PRAI US 2000-738022
                          Α
                                20001215
     WO 2001-US48063
                          W
                                20011214
    MARPAT 137:33287
OS
GI
```

```
* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *
```

```
AB Title compds. I [X, Y = F, H, CH3; R1 = H, F, I; R2 = H, F, OH; R16 = H, F; R17 = H, F; R3 = H, alkyl; L = bond, OCH2C(O); Q = e.g., II; R4 = H, CH3, CH2CH3, cyclopropyl; Z = O, S and related analogs] were prepared For instance, (S)-N-[[3-[3-fluoro-4-[4-(hydroxyacetyl)-1-piperazinyl]phenyl]-2-oxo-5-oxazolidinyl]methyl]acetamide was coupled to 4-azidosalicylic acid (DMF, EDCI, DMAP). This intermediate was reacted with chloramine-T/NaOH/125I2 to afford III. I are useful as photoaffinity probes.
```

IC ICM C07D413-00

```
CC 28-6 (Heterocyclic Compounds (More Than One Hetero Atom))
Section cross-reference(s): 1
```

```
437717-97-0P 437717-98-1P 437717-99-2P
IT
    437718-00-8P
                  437718-01-9P
                                  437718-02-0P
                                                 437718-03-1P
    437718-04-2P 437718-05-3P
                                  437718-06-4P
                                                 437718-07-5P
                                                               437718-08-6P
    437718-09-7P
                   437718-10-0P
                                  437718-11-1P
                                                437718-12-2P
                                                               437718-13-3P
    437718-14-4P
                   437718-15-5P
                                  437718-16-6P
    RL: RCT (Reactant); SPN (Synthetic preparation); PREP
```

(Preparation); RACT (Reactant or reagent)
 (intermediate; preparation of oxazolidinone photoaffinity probes)

IT **437717-86-7P** 437717-87-8P **437717-88-9P** 437717-89-0P 437717-90-3P 437717-91-4P 437717-92-5P 437717-93-6P 437717-94-7P 437717-95-8P 437717-96-9P

RL: ANT (Analyte); BSU (Biological study, unclassified); PRP (Properties); SPN (Synthetic preparation); ANST (Analytical study); BIOL (Biological study); PREP (Preparation)

(photoaffinity probe; preparation of oxazolidinone photoaffinity probes)
437717-97-0P 437717-99-2P 437718-00-8P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(intermediate; preparation of oxazolidinone photoaffinity probes)

RN 437717-97-0 HCAPLUS

IT

CN Benzoic acid, 4-azido-2-hydroxy-, 2-[4-[4-[(5S)-5-[(acetylamino)methyl]-2-oxo-3-oxazolidinyl]-2-fluorophenyl]-1-piperazinyl]-2-oxoethyl ester (9CI) (CA INDEX NAME)

RN 437717-99-2 HCAPLUS

CN Benzoic acid, 4-azido-3-iodo-, 2-[4-[4-[(5S)-5-[(acetylamino)methyl]-2-oxo-3-oxazolidinyl]-2-fluorophenyl]-1-piperazinyl]-2-oxoethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 437718-00-8 HCAPLUS

CN Benzoic acid, 4-azido-3-(trimethylstannyl)-, 2-[4-[4-[(5S)-5-[(acetylamino)methyl]-2-oxo-3-oxazolidinyl]-2-fluorophenyl]-1-piperazinyl]-2-oxoethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

### IT 437717-86-7P 437717-88-9P

RL: ANT (Analyte); BSU (Biological study, unclassified); PRP (Properties); SPN (Synthetic preparation); ANST (Analytical study); BIOL (Biological study); PREP (Preparation)

(photoaffinity probe; preparation of oxazolidinone photoaffinity probes)

RN 437717-86-7 HCAPLUS

CN Benzoic acid, 4-azido-2-hydroxy-5-(iodo-125I)-, 2-[4-[4-[(5S)-5-[(acetylamino)methyl]-2-oxo-3-oxazolidinyl]-2-fluorophenyl]-1-piperazinyl]-2-oxoethyl ester (9CI) (CA INDEX NAME)

RN 437717-88-9 HCAPLUS

CN Benzoic acid, 4-azido-3-(iodo-125I)-, 2-[4-[4-[(5S)-5-[(acetylamino)methyl]-2-oxo-3-oxazolidinyl]-2-fluorophenyl]-1-piperazinyl]-2-oxoethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

L37 ANSWER 15 OF 31 HCAPLUS COPYRIGHT 2006 ACS on STN

AN 2002:72093 HCAPLUS

DN 136:134748

```
Oxazolidinone derivatives as antimicrobials
ΤI
     Mehta, Anita; Arora, Sudershan K.; Das, Biswajit; Ray, Abhijit; Rudra,
IN
     Sonali; Rattan, Ashok
PA
     Ranbaxy Laboratories Limited, India
so
     PCT Int. Appl., 126 pp.
     CODEN: PIXXD2
DT
     Patent
     English
LA
FAN.CNT 2
                         KIND
                                DATE
                                            APPLICATION NO.
                                                                    DATE
     PATENT NO.
     WO 2002006278
                                20020124
                                                                    20010716
PΙ
                          A1
                                            WO 2001-IB1262
         W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
             CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,
             GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,
             LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT,
             RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US,
             UZ, VN, YU, ZA, ZW
         RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY,
             DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF,
             BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
     IN 193550
                                20040724
                                            IN 2000-DE654
                                                                    20000717
                          Α
     CA 2415965
                          AA
                                20020124
                                            CA 2001-2415965
                                                                    20010716
     AU 2001069370
                          A5
                                20020130
                                            AU 2001-69370
                                                                    20010716
     EP 1303511
                          A1
                                 20030423
                                            EP 2001-947730
                                                                    20010716
             AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
             IE, SI, LT, LV, FI, RO, MK, CY, AL, TR
     BR 2001012826
                          Α
                                20030624
                                            BR 2001-12826
                                                                    20010716
                          T2
     JP 2004504321
                                20040212
                                            JP 2002-512181
                                                                    20010716
     NZ 523700
                          Α
                                20041126
                                            NZ 2001-523700
                                                                    20010716
     WO 2003008389
                          A1
                                20030130
                                            WO 2002-IB167
                                                                    20020118
             AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
             CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,
             GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,
             LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH,
             PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ,
             UA, UG, US, UZ, VN, YU, ZA, ZM, ZW
         RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH,
             CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR,
             BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
     EP 1409464
                          A1
                                20040421
                                           EP 2002-787165
                                                                    20020118
             AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
             IE, SI, LT, LV, FI, RO, MK, CY, AL, TR
     WO 2003007870
                                20030130
                                            WO 2002-IB1609
                          A2
     WO 2003007870
                                 20030530
                          A3
             AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
             CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,
             GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,
             LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH,
             PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ,
             UA, UG, US, UZ, VN, YU, ZA, ZM, ZW
         RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY,
             KG, KZ, MD, RU, TJ, TM, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB,
             GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA,
             GN, GQ, GW, ML, MR, NE, SN, TD, TG
                                20040421
                                            EP 2002-727869
                          A2
                                                                    20020510
             AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
             IE, SI, LT, LV, FI, RO, MK, CY, AL, TR
     ZA 2003000471
                          Α
                                20031029
                                            ZA 2003-471
                                                                    20030117
     US 2004242591
                          A1
                                20041202
                                            US 2004-483905
                                                                    20040713
```

	US 2004254162	A1	20041216	US 2004-483904	20040713
PRAI	IN 2000-DE654	A	20000717		
	WO 2001-IB1262	W	20010716		
	WO 2002-IB167	W	20020118		
	WO 2002-IB1609	W	20020510		
os	MARPAT 136:134748				
GI					

Oxazolidinones I [T = 5-7-membered heterocyclic ring, aryl; R = CN, acyl, AB (un) substituted CO2H, NH2, CONH2, alkyl, CH2CH: NOH, CH: CH2, NO2; X = CH, CHS, CHO, N; Y, Z = H, alkyl, cycloalkyl, CO-3 bridging group; U, V = (un) substituted alkyl, H, F, Cl, Br; W = CH2, CO, CH2NH, NHCH2, (un) substituted CH2NHCH2, S, CH2CO, NH; R1 = acylamino, (un) substituted NH2, NHCSR2, NHCS2R2; R2 = H, (un) substituted alkyl, cycloalkyl, alkoxy; n = 0-3] were prepared The compds. are useful antimicrobial agents, effective against a number of human and veterinary pathogens, including gram-pos. aerobic bacteria such as multiply-resistant staphylococci, streptococci and enterococci as well as anaerobic organisms such as Bacterioides spp. and Clostridia spp. species, and acid fast organisms such as Mycobacterium tuberculosis, Mycobacterium avium and Mycobacterium spp. Thus, the furoyl derivative II was prepared from the 4-unsubstituted piperdine fragment and furoyl chloride. II had min. inhibitory concns. against methicillin-resistant Staph. aureus 15187 and against Enteroccus fecalis 29212 of 2  $\mu q/mL$ .

IC ICM C07D413-14

ICS C07D413-12; A61K031-42

CC 28-6 (Heterocyclic Compounds (More Than One Hetero Atom)) Section cross-reference(s): 10

IT 392659-25-5P 392659-31-3P 392659-33-5P 392659-36-8P 392659-41-5P 392659-43-7P 392659-44-8P 392659-47-1P 392659-48-2P 392659-49-3P 392659-51-7P 392659-52-8P 392659-53-9P 392659-58-4P 392659-59-5P 392659-60-8P 392659-64-2P 392659-65-3P 392659-66-4P 392659-68-6P 392659-69-7P 392659-70-0P 392659-71-1P 392659-75-5P 392659-76-6P 392659-77-7P **392659-79-9P** 392659-80-2P 392659-81-3P 392659-82-4P 392659-85-7P 392659-86-8P 392659-87-9P 392659-89-1P 392659-90-4P 392659-91-5P 392659-95-9P RL: SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of azacycloalkylphenyloxazolidinones as antimicrobials) IT 392659-36-8P 392659-79-9P

RL: SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of azacycloalkylphenyloxazolidinones as antimicrobials)

RN 392659-36-8 HCAPLUS
CN Acetamide, N-[[(5S)-3-[3-fluoro-4-[4-(2-thienylacetyl)-1-piperazinyl]phenyl]-2-oxo-5-oxazolidinyl]methyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 392659-79-9 HCAPLUS

CN Acetamide, N-[[(5S)-3-[3-fluoro-4-[4-(2-furanylacetyl)hexahydro-1H-1,4-diazepin-1-yl]phenyl]-2-oxo-5-oxazolidinyl]methyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A

PAGE 2-A

# RE.CNT 11 THERE ARE 11 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

```
L37 ANSWER 16 OF 31 HCAPLUS COPYRIGHT 2006 ACS on STN
AN
    2002:31444 HCAPLUS
DN
    136:102377
ΤI
    Novel isoxazolinone antibacterial agents
    Springer, Dane M.; Goodrich, Jason T.; Meng, Zhaoxing; Snyder, Lawrence B.
IN
PA ·
    Bristol-Myers Squibb Co., USA
    PCT Int. Appl., 51 pp.
so
    CODEN: PIXXD2
DT
    Patent
    English
LΑ
FAN.CNT 1
    PATENT NO.
                       KIND
                               DATE
                                          APPLICATION NO.
                                                                  DATE
                        _ _ _ _
                               _____
                                           -----
                                         WO 2001-US20850
PΤ
    WO 2002002555
                        A1
                               20020110
        W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
            CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,
            GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,
            LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT,
            RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ,
            VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
        RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY,
            DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF,
            BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
    US 2002040142
                         A1
                               20020404
                                           US 2001-893845
    US 6465456
                         B2
                               20021015
PRAI US 2000-214977P
                         Ρ
                               20000629
    MARPAT 136:102377
os
GΙ
```

#### \* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT \*

Novel isoxazolinone derivs. of formula I [L = O or S; L1 = R4(CH2)mCR5(NR6R7)C(O)-, R8R9N(CH2)nC(O)-, C1-6alkylC(O)CH2C(O)-, R10XCH2C(O)-, R10CH=CHC(O)-, R10NHC(O)CH2-, R10(CH2)p-, and R10S(O)2-, (m = 0-4; n = 1-4; p = 2-6; X = a bond, S, O, NH, and N(C1-4alkyl); R4 = H, OH, C1-6thioalkoxy, imidazolyl, indolyl, -CO2H, and -NHC(=NH)NH2; R5 = H or C1-6alkyl (R4 and R5 taken together can be -CH2- when m = 1); R6,R7 = independently H or C1-6alkyl (R4 and R6 taken together can be -(CH2)q- when m = 1 and wherein q = 2 or 3); R8,R9 = independently H or C1-6alkyl (R8 and R9 taken together with the nitrogen to which they are attached = morpholin-4-yl, piperazin-1-yl, piperidin-1-yl, or -NHC(=NH)NH2; R10 = heteroaryl)); R1 = H, (un)substituted C1-8alkyl, C3-6cycloalkyl and C1-8alkoxy; R2, R3 = independently H, halo, OH, nitro, amino, cyano, C1-6alkyl, C1-6alkoxy, and trifluoromethyl] or a pharmaceutically acceptable salt, which possess antibacterial activity and are useful in

```
the treatment of bacterial diseases, were prepared Thus, amine II was
     reacted with Boc-L-tryptophan-Boc-OH in the presence of DCC to give III (R
     = Boc), which was deprotected with TFA to afford III (R = H) which was
     isolated as its dihydrochloride salt in combined 53% yield.
IC
     ICM C07D413-10
         CO7D413-14; A61K031-404; A61K031-4178; A61K031-4192; A61K031-42
     ICS
     28-6 (Heterocyclic Compounds (More Than One Hetero Atom))
CC
     Section cross-reference(s): 1, 34, 63
     388086-50-8P 388086-52-0P
IT
     RL: PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic
     preparation); THU (Therapeutic use); BIOL (Biological study); PREP
     (Preparation); RACT (Reactant or reagent); USES (Uses)
        (preparation of novel isoxazolinone antibacterial agents)
                                   388086-40-6P
IT
     388086-35-9P
                    388086-38-2P
                                                  388086-45-1P
                                                                  388086-46-2P
     388086-53-1P
                    388086-54-2P
                                   388086-55-3P
                                                  388086-56-4P
                                                                  388086-57-5P
     388086-58-6P
                    388086-59-7P
                                   388086-60-0P
                                                  388086-61-1P
                                                                  388086-62-2P
     388086-63-3P
                    388086-64-4P 388086-65-5P
                                                388086-66-6P
                                                  388086-70-2P
     388086-67-7P
                    388086-68-8P
                                   388086-69-9P
                                                                  388086-71-3P
     388086-72-4P
                    388086-73-5P
                                   388086-74-6P
                                                  388086-75-7P
                                                                  388086-76-8P
     388086-77-9P
                    388086-78-0P
                                   388086-79-1P
                                                  388086-80-4P
                                                                  388086-81-5P
     388086-82-6P
     RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU
     (Therapeutic use); BIOL (Biological study); PREP (Preparation);
     USES (Uses)
        (preparation of novel isoxazolinone antibacterial agents)
     388086-52-0P
TΤ
     RL: PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic
     preparation); THU (Therapeutic use); BIOL (Biological study); PREP
     (Preparation); RACT (Reactant or reagent); USES (Uses)
        (preparation of novel isoxazolinone antibacterial agents)
     388086-52-0 HCAPLUS
RN
CN
     Acetamide, N-[[4-[3-fluoro-4-[4-(4-morpholinylacetyl)-1-
```

piperazinyl]phenyl]-5-oxo-2(5H)-isoxazolyl]methyl]- (9CI) (CA INDEX NAME)

PAGE 2-A

IT 388086-65-5P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of novel isoxazolinone antibacterial agents)

RN 388086-65-5 HCAPLUS

CN Acetamide, N-[[4-[3-fluoro-4-[4-(1H-imidazol-4-ylacetyl)-1-piperazinyl]phenyl]-5-oxo-2(5H)-isoxazolyl]methyl]- (9CI) (CA INDEX NAME)

RE.CNT 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

L37 ANSWER 17 OF 31 HCAPLUS COPYRIGHT 2006 ACS on STN

AN 2001:798227 HCAPLUS

DN 135:344473

TI Oxazolidinone derivatives with antibacterial activity

IN Gravestock, Michael Barry; Betts, Michael John; Griffin, David Alan;
Matthews, Ian Richard

PA Astrazeneca AB, Swed.; Astrazeneca UK Limited

SO PCT Int. Appl., 143 pp.

CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 1

2124	PATENT NO.					KIND DATE			APPLICATION NO.							DATE				
PI		VO 2001081350			<b>A</b> 1	-	2001	1101		WO	20	01-0	GB18	15		2	0010			
		W:							ΑZ,											
			CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EE	Ξ,	ES,	FI,	GB,	GD,	GE,	GH,	GM,	
			HR,	HU,	ID,	IL,	IN,	IS,	JP,	KE,	KC	3,	KP,	KR,	ΚZ,	LC,	LK,	LR,	LS,	
								•	MK,	•		•		•	•	•		•	•	
									SL,											
									BY,											
		RW:	GH,	GM,	KΕ,	LS,	MW,	MZ,	SD,	SL,	SZ	Ζ,	TZ,	UG,	ZW,	ΑT,	BE,	CH,	CY,	
									GR,									TR,	BF,	
									GN,											
														20010423						
				40		Α	A 20030107			BR 2001-10240							20010423			
	EP	1286	998			A1	A1 20030305 B1 20040609			EP 2001-921669						20010423				
	ΕP																			
		R:							FR,					LI,	LU,	ΝL,	SE,	MC,	PT,	
									MK,	-		-								
	JP	2003	5312	11		T2	20031021				JP 2001-578439						20010423			
	EE	2002	0059	В		A	20040415				EE 2002-598						20010423			
	NZ	52170	65			A	A 20040528				NZ 2001-521765						20010423			
	AT	2687	78			E				AT 2001-921669										
		1286								PT 2001-921669										
		2220				T3		2004	1216	ES 2001-1921669							20010423			
		7817		0.7		B2		2005	0010	AU 2001-48636							20010423			
	ZA	2002	0020	8 / 01		A			0211											
		2002							1209											
		2003				A1			1120											
דגמת		1053 2000				ΑI			0218		HK	20	103	1053	94		20	030	/25	
PRAI		2000				A		2000								•				
os		ZUUI:				W		2001	0423											
GI	("LFAL"	CPMI .	133:3	2444	, 5															
G1																				

The title compds. [I; X = O, NH, S, etc.; HET = (un)substituted C-linked 5-membered heteroaryl ring containing 2-4 heteroatoms selected from N, O and S, etc.; Q = II, III, etc. (wherein R2, R3 = H, F; T = an N-linked (fully unsatd.) 5-membered heteroaryl ring system or IV; Rc = R13CO, R13SO2, R13CS, etc.; R13 = alkyl, etc.)], useful as antibacterial agents, were prepared and formulated. E.g., a multi-step synthesis of the oxazoline (R)-V which showed MIC of 0.125 μg/mL against Staphylococcus aureus (Oxford), was given.

IC ICM C07D491-10

ICS C07D413-14; A61K031-42; A61P031-04; C07D491-10; C07D317-00; C07D221-00

CC 28-6 (Heterocyclic Compounds (More Than One Hetero Atom))

Section cross-reference(s): 1, 63

IT 371194-21-7P 371194-22-8P 371194-24-0P 371194-25-1P 371194-27-3P 371194-28-4P 371194-29-5P 371194-30-8P 371194-31-9P 371194-32-0P 371194-33-1P 371194-36-4P 371194-38-6P 371194-40-0P 371194-41-1P 371194-43-3P 371194-44-4P 371194-45-5P 371194-46-6P 371194-47-7P 371194-49-9P 371194-50-2P 371194-51-3P 371194-52-4P 371194-53-5P 371194-54-6P 371194-55-7P 371194-56-8P 371194-58-0P 371194-59-1P 371194-60-4P 371194-61-5P 371194-62-6P 371194-64-8P 371194-65-9P 371194-66-0P 371194-68-2P 371194-70-6P 371194-72-8P 371194-74-0P 371194-76-2P 371194-77-3P 371194-78-4P 371194-81-9P 371194-83-1P 371194-84-2P 371194-85-3P 371194-86-4P 371194-87-5P 371194-91-1P 371194-92-2P 371194-93-3P 371194-94-4P 371194-95-5P 371194-96-6P 371194-97-7P 371194-98-8P 371194-99-9P 371195-00-5P 371195-02-7P 371195-03-8P 371195-04-9P 371195-05-0P 371195-07-2P 371195-09-4P 371195-10-7P 371195-11-8P 371195-12-9P 371195-13-0P 371195-14-1P 371195-16-3P **371195-17-4P** 371195-18-5P 371195-19-6P 371195-20-9P 371195-21-0P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(oxazolidinone derivs. with antibacterial activity)

IT 371194-29-5P 371195-17-4P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use);

BIOL (Biological study); PREP (Preparation); USES (Uses) (oxazolidinone derivs. with antibacterial activity)

RN

371194-29-5 HCAPLUS
Piperazine, 1-[2-fluoro-4-[(5R)-2-oxo-5-(1H-1,2,3-triazol-1-ylmethyl)-3-CN oxazolidinyl]phenyl]-4-(4-morpholinylacetyl)- (9CI) (CA INDEX NAME)

Page 94

Absolute stereochemistry.

371195-17-4 HCAPLUS RN

Piperazine, 1-[2-fluoro-4-[(5R)-2-oxo-5-(1H-1,2,3-triazol-1-ylmethyl)-3-CN oxazolidinyl]phenyl]-4-(4-morpholinylacetyl)-, monohydrochloride (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RE.CNT 8 THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS RECORD

#### ALL CITATIONS AVAILABLE IN THE RE FORMAT

L37 ANSWER 18 OF 31 HCAPLUS COPYRIGHT 2006 ACS on STN

AN 2001:597972 HCAPLUS

DN 135:180754

TI Preparation of oxazolidinone thioamides with piperazine amide substituents for pharmaceutical use in the treatment of microbial infections

IN Hester, Jackson B., Jr.

PA Pharmacia & Upjohn Co., USA

SO PCT Int. Appl., 43 pp.

CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 2

FAN.CNT 2																			
									E APPLICATION						DATE				
ΡI	WO								WO 2001-US682										
		W:	AE.	AG,	AL.	AM.	AT.	AU,	AZ.	BA.	BB.	BG.	BR.	BY,	BZ.	CA.	CH.	CN.	
								DM,											
			•	•	•	•		JP,	•	•	•	•	•			•	•	•	
			•	•	•	•	•	MK,	•	•	•	•	•	•	•	•	•	•	
			•			•		SL,	•		-	-	-	-	-	-	-	-	
			•	ZA,	•	J.,	J.,	J.,	-0,	,	,	,	,	J.,		55,	,	V 2. ,	
			•	•		LS.	MW.	MZ,	SD.	SI.	SZ.	ТZ.	UG.	ZW.	AT.	BE.	CH.	CY.	
			-		•	•		GB,				•	•	•		•		•	
			•	•	•	•	•	GA,	•	•	•	•	•	•	•	•		,	
	CA	2395															0010	207	
	CA 2395648 AU 2001034428								CA 2001-2395648 AU 2001-34428										
										BR 2001-7645									
		1263					A1 20021211 EP 2001-906529												
						B1 20050824									-	0010			
								ES,			GR.	TT.	T.T.	T.II	NT.	SE.	MC.	PT.	
			•	•	•	•	•	•	•	•	•	•	<b></b> ,	шо,	112,	52,	,	/	
	.TP	2003	•	•	•	•	•	•	•	CY, AL, TR JP 2001-558436						20010207			
														20010207					
		3027						2005									0010		
		2248						2006											
PRAT		2000										-				2	0010		
		2001																	
os		RPAT																	
GI				1007.	<i>,</i> .														
<b>J</b> 1																			

AB Oxazolidinone thioamides, such as I [R1 = H, NH2, alkylamino, alkenyl, alkyloxy, alkylthio, cycloalkyl, alkyl; R2, R3 = H, F, Cl, alkyl; R4 = CN, acyl, thioacyl, alkyloxyacyl, sulfonylmethylacyl, etc.] which have potent activities against gram-pos. and gram-neg. bacteria, were prepared for therapeutic use in the treatment of bacterial infections particularly of the skin and eye. Thus, PNU 255889 (II) was prepared via a multistep synthetic sequence which included N-acylation of III with MeSCH2CO2H, S-oxidation with sodium periodate, conversion of the phthalimido group to NH2 and N-thioacylation with MeCH2CS2Me. The prepared oxazolidinone thioamides were evaluated for min. inhibitory concns. of antibacterial activity against bacterial strains such as Staphylococcus aureus, S. epidermidis, Streptococcus pneumoniae, Enterococcus faecalis Moraxella catarrhalis and H. influenzae. Pharmaceutical formulations for oral, topical, transdermal, and parenteral delivery were discussed.

IC ICM C07D263-22

ICS A61K031-42; A61P031-00

CC 28-6 (Heterocyclic Compounds (More Than One Hetero Atom))
 Section cross-reference(s): 10, 63

IT 345224-19-3P 354578-45-3P 354578-46-4P 354578-47-5P 354578-48-6P 354578-49-7P 354578-50-0P 354578-51-1P 354578-52-2P 354578-53-3P 354578-54-4P 354578-55-5P 354578-56-6P 354578-61-3P 354578-62-4P 354578-65-7P 354578-66-8P 354578-67-9P 354578-68-0P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation);

RACT (Reactant or reagent); USES (Uses)

(preparation of oxazolidinone thioamides with piperazine amide substituents for pharmaceutical use in the treatment of microbial infections)

IT 354578-63-5P 354578-64-6P 354819-74-2P 354819-77-5P 354819-82-2P 354819-83-3P 354819-85-5P 354819-86-6P 354819-87-7P 354819~94-6P 354819-96-8P 354820-02-3P 354820-03-4P 354820-05-6P 354820-07-8P 354987-17-0P 354987-18-1P 354987-21-6P 354987-23-8P 354987-24-9P 354987-25-0P 354987-26-1P 354987-30-7P RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use);
BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of oxazolidinone thioamides with piperazine amide substituents for pharmaceutical use in the treatment of microbial infections)

IT 10303-88-5P 27912-85-2P 93652-31-4P **345224-18-2P** 

354578-57-7P 354578-58-8P 354578-59-9P 354578-60-2P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP

(Preparation); RACT (Reactant or reagent)

(preparation of oxazolidinone thioamides with piperazine amide substituents for pharmaceutical use in the treatment of microbial infections)

IT 354578-67-9P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)

(preparation of oxazolidinone thioamides with piperazine amide substituents for pharmaceutical use in the treatment of microbial infections)

RN 354578-67-9 HCAPLUS

CN Carbamic acid, [[(5S)-3-[3-fluoro-4-[4-(phenoxyacetyl)-1 piperazinyl]phenyl]-2-oxo-5-oxazolidinyl]methyl]-, 1,1-dimethylethyl ester
 (9CI) (CA INDEX NAME)

Absolute stereochemistry.

#### T 354578-64-6P 354987-17-0P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of oxazolidinone thioamides with piperazine amide substituents for pharmaceutical use in the treatment of microbial infections)

RN 354578-64-6 HCAPLUS

CN Carbamic acid, [[(5S)-3-[3-fluoro-4-[4-[1-oxo-3-(phenylmethoxy)propyl]-1piperazinyl]phenyl]-2-oxo-5-oxazolidinyl]methyl]-, 1,1-dimethylethyl ester
(9CI) (CA INDEX NAME)

354987-17-0 HCAPLUS RN

Propanethioamide, N-[[(5S)-3-[3-fluoro-4-[4-(phenoxyacetyl)-1-CNpiperazinyl]phenyl]-2-oxo-5-oxazolidinyl]methyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

#### IT 345224-18-2P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP

(Preparation); RACT (Reactant or reagent)

(preparation of oxazolidinone thioamides with piperazine amide substituents for pharmaceutical use in the treatment of microbial infections)

SACKEY 10/717237 06/05/2006 Page 99

345224-18-2 HCAPLUS RN

Carbamic acid, [[(5S)-3-[3-fluoro-4-[4-[(phenylmethoxy)acetyl]-1-CN piperazinyl]phenyl]-2-oxo-5-oxazolidinyl]methyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

### Absolute stereochemistry.

#### RE.CNT 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

L37 ANSWER 19 OF 31 HCAPLUS COPYRIGHT 2006 ACS on STN

ΑN 2001:482178 HCAPLUS

135:76881 DN

ΤI Preparation of N-(oxooxazolidinylmethyl)thioamides and analogs as bactericides

Hester, Jackson B., Jr.; Nidy, Eldon George; Perricone, Salvatore Charles; IN Poel, Toni-Jo

Pharmacia & Upjohn Company, USA PΑ

U.S., 93 pp., Cont.-in-part of U.S. 6,218,413. SO CODEN: USXXAM

Patent DT

LΑ English

FAN.CNT 2				
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI US 6255304	B1	20010703	US 1998-200904	19981127
US 6218413	B1	20010417	US 1998-80751	19980518
US 6362189	B1	20020326	US 2000-712055	20001114
US 6342513	B1	20020129	US 2000-713739	20001115
US 2001041728	A1	20011115	US 2001-822072	20010330
US 6537986	B2	20030325		
US 2002016323	<b>A1</b>	20020207	US 2001-822666	20010330
PRAI US 1997-48342P	P	19970530		
US 1998-80751	A2	19980518		
US 1998-200904	A3	19981127		
OS MARPAT 135:76881				

RZZ1CH2NHCSR1 [I; R = e.g., N-attached-(oxo)thiaazacycloalkyl; R1 = H, AB (alkyl)amino, alkyl, alkoxy, etc.; Z = e.g., fluorophenylene; Z1 = e.g., 2-oxooxazolidine-3,5-diyl] were prepared Thus, 1,4-hexahydrothiazepine was N-arylated by 3,4-F2C6H3NO2 and the reduced and N-protected product cyclocondensed with (R)-glycidyl butyrate to give, in 4 addnl. steps, title compound II. Data for biol. activity of I were given. IC ICM A61K031-54 ICS A61K031-535; C07D417-00; C07D413-00 INCL 514227800 28-14 (Heterocyclic Compounds (More Than One Hetero Atom)) CC Section cross-reference(s): 1 IT 5415-95-2P 101184-85-4P, 1,4-Hexahydrothiazepine 168828-65-7P 168828-90-8P 168828-67-9P 198410-25-2P 216869-05-5P 216869-07-7P 216869-09-9P 216869-10-2P 216869-11-3P 216869-12-4P 216869-13-5P 216869-14-6P 216869-15-7P 216869-16-8P 216869-18-0P 216869-19-1P 216869-20-4P 216869-21-5P 216869-22-6P 216869-23-7P 216869-25-9P 216869-26-0P 216869-27-1P 216869-28-2P 216869-29-3P 216869-30-6P 216869-31-7P 216869-32-8P 216869-33-9P 216869-34-0P 216869-35-1P 216869-37-3P 216869-39-5P 216869-40-8P 216869-41-9P 216869-42-0P 216869-43-1P 216869-44-2P **216869-45-3P** 216869-46-4P 216869-47-5P 216869-48-6P 216869-49-7P 216869-50-0P 273376-94-6P 273376-95-7P 273376-96-8P 273376-97-9P 273376-99-1P 273377-00-7P 273377-01-8P 273377-02-9P 273377-03-0P 273377-04-1P 273377-08-5P RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent) (preparation of N-(oxooxazolidinylmethyl)thioamides and analogs as bactericides) IT 216869-45-3P RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent) (preparation of N-(oxooxazolidinylmethyl)thioamides and analogs as bactericides) RN216869-45-3 HCAPLUS

Carbamic acid, [[(5S)-3-[3,5-difluoro-4-[4-[(phenylmethoxy)acetyl]-1-

piperazinyl]phenyl]-2-oxo-5-oxazolidinyl]methyl]-, phenylmethyl ester

Absolute stereochemistry.

(CA INDEX NAME)

CN

RE.CNT 11 THERE ARE 11 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

L37 ANSWER 20 OF 31 HCAPLUS COPYRIGHT 2006 ACS on STN

2001:453039 HCAPLUS AN

135:46171 DN

Preparation of N-[[[(benzoyloxyacetyl)piperazino]phenyl]oxazolidinylmethyl ΤI ]alkanthioamides and analogs as bactericides

IN Hester, Jackson B., Jr.

PA Pharmacia & Upjohn Co., USA

so PCT Int. Appl., 36 pp.

CODEN: PIXXD2

Patent DT

LA English

FAN.CNT 1																	
	PATENT NO.					KIND DATE			Ž	APPL	ICAT		DATE				
ΡI	WO 20	01044	212		A1		20010621		WO 2000-US32432						20001206		
	W	: AI	, AG,	AL,	AM,	ΑT,	ΑU,	ΑZ,	BA,	BB,	BG,	BR,	BY,	ΒZ,	CA,	CH,	CN,
		CI	, CU,	CZ,	DE,	DK,	DM,	DZ,	EE,	ES,	FI,	GB,	GD,	GE,	GH,	GM,	HR,
		н	, ID,	IL,	IN,	IS,	JP,	KE,	KG,	KP,	KR,	ΚZ,	LC,	LK,	LR,	LS,	LT,
		LU	, LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	MZ,	NO,	NZ,	PL,	PT,	RO,	RU,
		SI	, SE,	SG,	SI,	SK,	SL,	TJ,	TM,	TR,	TT,	TZ,	UA,	UG,	US,	UZ,	VN,
		Υ	, ZA,	ZW,	AM,	AZ,	BY,	KG,	KZ,	MD,	RU,	TJ,	TM				
	R	W: GI	, GM,	KE,	LS,	MW,	MZ,	SD,	SL,	SZ,	TZ,	UG,	ZW,	ΑT,	BE,	CH,	CY,
			, DK,														
		В	, CF,	CG,	CI,	CM,	GA,	GN,	GW,	ML,	MR,	NE,	SN,	TD,	TG	-	-
	TW 54	4449						TW 2000-89125030						20001124			
	CA 23	87047			AA 20010621			CA 2000-2387047						20001206			
	AU 20	01018	058		A5		2001	0625	AU 2001-18058						2	0001	206
	US 62	81210			B1		2001	0828	1	US 2	000-	7320	88		2	0001	206
	BR 20	BR 2000015177			Α		2002	0618	BR 2000-15177								
	EP 12	42395			<b>A1</b>		2002	0925	1	EP 2	000-	9808	49				
	EP 12	42395			B1 20050202			0202									
	R	: A7	, BE,	CH,	DE,	DK,	ES,	FR,	GB,	GR,	IT,	LI,	LU,	NL,	SE,	MC,	PT,

```
IE, SI, LT, LV, FI, RO, MK, CY, AL, TR
                                20030520
                                            JP 2001-544702
                                                                   20001206
     JP 2003516977
                          T2
     AT 288423
                                            AT 2000-980849
                                                                   20001206
                          E
                                20050215
     PT 1242395
                                            PT 2000-980849
                          Т
                                20050531
                                                                   20001206
     ES 2236006
                          T3
                                20050716
                                            ES 2000-980849
                                                                   20001206
                                            ZA 2002-2953
     ZA 2002002953
                          Α
                                20030715
                                                                   20020415
                                            NO 2002-2811
     NO 2002002811
                          Α
                                20020613
                                                                   20020613
PRAI US 1999-170675P
                          P
                                19991214
     WO 2000-US32432
                          W
                                20001206
os
     MARPAT 135:46171
AB
     R4Z4CO2CH2COZ1Z2Z3CH2R [I; R = NHC(:X)R1 or ZR9; R1 = H, (alkyl)amino,
     alkyl, alkoxy, etc.; R4 = NR5COCHR6NR7R8 or CHR5NR7R8; R5 = H or Me; R6 =
     H or (un) substituted alkyl; R7,R8 = H or alkyl; NR7R8 = heterocyclyl; R9 =
     heterocyclyl; Z = O, S, NH; Z1 = piperazine-1,4-diyl throughout; Z2 =
     2,6-(un)substituted-1,4-phenylene; Z3 = e.g., 2-oxo-3,5-oxazolidinediyl;
     Z4 = 1,3- or 1,4-phenylene] were prepared for use against gram neg.
     bacteria. Thus, (S)-R10Z1Z2Z3CH2NHR11 (II; Z2 = 2-fluoro-1,4-phenylene,
     Z3 = 2-oxo-3,5-oxazolidinediyl) (III; R10 = H, R11 = Boc) was amidated by
     PhCH2OCH2COCl and the debenzylated product esterified by 4-(ClH2C)C6H4COCl
     to give, after amination and deprotection, III [R10 = 4-
     (Me2NH2C)C6H4CO2CH2CO](IV; R11 = H). The latter was amidated by EtCS2Me
     to give IV (R11 = CSEt). Data for biol. activity of I were given.
IC
     ICM C07D263-20
     ICS A61K031-495; A61P031-04
CC
     28-6 (Heterocyclic Compounds (More Than One Hetero Atom))
     Section cross-reference(s): 1
TΤ
     345224-04-6P 345224-05-7P 345224-06-8P
     345224-07-9P 345224-08-0P 345224-09-1P
     345224-10-4P 345224-12-6P 345224-13-7P
     345224-14-8P 345224-15-9P 345224-16-0P
     345224-17-1P
     RL: BAC (Biological activity or effector, except adverse); BSU (Biological
     study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use);
     BIOL (Biological study); PREP (Preparation); USES (Uses)
        (preparation of N-[[{(benzoyloxyacetyl)piperazino]phenyl]oxazolidinylmethyl]
        alkanthioamides and analogs as bactericides)
IT
     345224-18-2P
                    345224-19-3P 345224-20-6P
     345224-21-7P
                  345224-22-8P 345224-23-9P
     345224-24-0P
                   345224-25-1P
                                   345224-26-2P
                                                  345224-27-3P
     345224-28-4P 345224-29-5P 345224-30-8P
     345224-31-9P 345224-32-0P 345224-33-1P 345224-34-2P
    RL: RCT (Reactant); SPN (Synthetic preparation); PREP
     (Preparation); RACT (Reactant or reagent)
        (preparation of N-[[[(benzoyloxyacetyl)piperazino]phenyl]oxazolidinylmethyl]
        alkanthioamides and analogs as bactericides)
     345224-04-6P 345224-05-7P 345224-06-8P
     345224-07-9P 345224-08-0P 345224-09-1P
     345224-10-4P 345224-12-6P 345224-13-7P
     345224-14-8P 345224-15-9P 345224-16-0P
     345224-17-1P
     RL: BAC (Biological activity or effector, except adverse); BSU (Biological
     study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use);
     BIOL (Biological study); PREP (Preparation); USES (Uses)
        (preparation of N-[[[(benzoyloxyacetyl)piperazino]phenyl]oxazolidinylmethyl]
        alkanthioamides and analogs as bactericides)
RN
     345224-04-6 HCAPLUS
     Benzoic acid, 4-[(dimethylamino)methyl]-, 2-[4-[2-fluoro-4-[(5S)-2-oxo-5-
CN
     [[(1-thioxopropyl)amino]methyl]-3-oxazolidinyl]phenyl]-1-piperazinyl]-2-
                          (CA INDEX NAME)
     oxoethyl ester (9CI)
```

Absolute stereochemistry.

PAGE 1-A

PAGE 2-A

|

RN 345224-05-7 HCAPLUS

CN Benzoic acid, 3-[(dimethylamino)methyl]-, 2-[4-[2-fluoro-4-[(5S)-2-oxo-5-[(1-thioxopropyl)amino]methyl]-3-oxazolidinyl]phenyl]-1-piperazinyl]-2-oxoethyl ester (9CI) (CA INDEX NAME)

PAGE 2-A

RN 345224-06-8 HCAPLUS

CN Benzoic acid, 3-(4-morpholinylmethyl)-, 2-[4-[2-fluoro-4-[(5S)-2-oxo-5-[[(1-thioxopropyl)amino]methyl]-3-oxazolidinyl]phenyl]-1-piperazinyl]-2-oxoethyl ester (9CI) (CA INDEX NAME)

PAGE 2-A

RN 345224-07-9 HCAPLUS
CN Benzoic acid, 3-[(4-methyl-1-piperazinyl)methyl]-, 2-[4-[2-fluoro-4-[(5S)-2-oxo-5-[[(1-thioxopropyl)amino]methyl]-3-oxazolidinyl]phenyl]-1-piperazinyl]-2-oxoethyl ester (9CI) (CA INDEX NAME)

PAGE 2-A

RN 345224-08-0 HCAPLUS

CN Benzoic acid, 3-[(diethylamino)methyl]-, 2-[4-[2-fluoro-4-[(5S)-2-oxo-5-[[(1-thioxopropyl)amino]methyl]-3-oxazolidinyl]phenyl]-1-piperazinyl]-2-oxoethyl ester (9CI) (CA INDEX NAME)

PAGE 2-A

RN 345224-09-1 HCAPLUS

CN Benzoic acid, 4-[(diethylamino)methyl]-, 2-[4-[2-fluoro-4-[(5S)-2-oxo-5-[[(1-thioxopropyl)amino]methyl]-3-oxazolidinyl]phenyl]-1-piperazinyl]-2oxoethyl ester (9CI) (CA INDEX NAME)

PAGE 2-A

RN 345224-10-4 HCAPLUS

CN Benzoic acid, 4-(4-morpholinylmethyl)-, 2-[4-[2-fluoro-4-[(5S)-2-oxo-5-[[(1-thioxopropyl)amino]methyl]-3-oxazolidinyl]phenyl]-1-piperazinyl]-2oxoethyl ester (9CI) (CA INDEX NAME)

PAGE 2-A || S

RN 345224-12-6 HCAPLUS
CN Benzoic acid, 4-[(4-methyl-1-piperazinyl)methyl]-, 2-[4-[2-fluoro-4-[(5S)-2-oxo-5-[[(1-thioxopropyl)amino]methyl]-3-oxazolidinyl]phenyl]-1-piperazinyl]-2-oxoethyl ester (9CI) (CA INDEX NAME)

PAGE 2-A

RN 345224-13-7 HCAPLUS

CN Benzoic acid, 4-[(dimethylamino)methyl]-, 2-[4-[4-[(5S)-5-[(cyclopropylthioxomethyl)amino]methyl]-2-oxo-3-oxazolidinyl]-2-fluorophenyl]-1-piperazinyl]-2-oxoethyl ester (9CI) (CA INDEX NAME)

PAGE 2-A

RN 345224-14-8 HCAPLUS

CN Benzoic acid, 4-[(dimethylamino)methyl]-, 2-[4-[4-[(5S)-5-[(aminothioxomethyl)amino]methyl]-2-oxo-3-oxazolidinyl]-2-fluorophenyl]-1-piperazinyl]-2-oxoethyl ester (9CI) (CA INDEX NAME)

PAGE 2-A

RN

345224-15-9 HCAPLUS Benzoic acid, 4-[(aminoacetyl)amino]-, 2-[4-[2-fluoro-4-[(5S)-2-oxo-5-[[(1-CN thioxopropyl)amino]methyl]-3-oxazolidinyl]phenyl]-1-piperazinyl]-2oxoethyl ester (9CI) (CA INDEX NAME)

PAGE '2-A

|| s

RN 345224-16-0 HCAPLUS

CN Benzoic acid, 4-[(aminoacetyl)amino]-, 2-[4-[4-[(5S)-5-[[(cyclopropylthioxomethyl)amino]methyl]-2-oxo-3-oxazolidinyl]-2fluorophenyl]-1-piperazinyl]-2-oxoethyl ester (9CI) (CA INDEX NAME)

PAGE 2-A

|| s

RN 345224-17-1 HCAPLUS
CN Benzoic acid, 4-[[(2S)-2-amino-1-oxopropyl]amino]-, 2-[4-[2-fluoro-4-[(5S)-2-oxo-5-[[(1-thioxopropyl)amino]methyl]-3-oxazolidinyl]phenyl]-1-piperazinyl]-2-oxoethyl ester (9CI) (CA INDEX NAME)

RN 345224-20-6 HCAPLUS
CN Benzoic acid, 4-(chloromethyl)-, 2-[4-[4-[(5S)-5-[[(1,1-dimethylethoxy)carbonyl]amino]methyl]-2-oxo-3-oxazolidinyl]-2-fluorophenyl]-1-piperazinyl]-2-oxoethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A

PAGE 2-A

RN 345224-21-7 HCAPLUS

CN Benzoic acid, 4-[(dimethylamino)methyl]-, 2-[4-[4-[(5S)-5-[[[(1,1-dimethylethoxy)carbonyl]amino]methyl]-2-oxo-3-oxazolidinyl]-2-fluorophenyl]-1-piperazinyl]-2-oxoethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A

$$\mathsf{Me}_2\mathsf{N} \\ \mathsf{N} \\ \mathsf{N} \\ \mathsf{N} \\ \mathsf{N} \\ \mathsf{N} \\ \mathsf{OBu-t} \\ \mathsf{N} \\ \mathsf{OBu-t} \\ \mathsf{N} \\$$

PAGE 2-A

||

RN 345224-23-9 HCAPLUS

CN Benzoic acid, 3-(chloromethyl)-, 2-[4-[4-[(5S)-5-[[((1,1-dimethylethoxy)carbonyl]amino]methyl]-2-oxo-3-oxazolidinyl]-2-fluorophenyl]-1-piperazinyl]-2-oxoethyl ester (9CI) (CA INDEX NAME)

PAGE 2-A

RN 345224-24-0 HCAPLUS

CN Benzoic acid, 3-[(dimethylamino)methyl]-, 2-[4-[4-[(5S)-5-[[[(1,1-dimethylethoxy)carbonyl]amino]methyl]-2-oxo-3-oxazolidinyl]-2-fluorophenyl]-1-piperazinyl]-2-oxoethyl ester (9CI) (CA INDEX NAME)

PAGE 2-A

RN 345224-28-4 HCAPLUS

CN Carbamic acid, [[(5S)-3-[3-fluoro-4-[4-[(4-nitrobenzoyl)oxy]acetyl]-1-piperazinyl]phenyl]-2-oxo-5-oxazolidinyl]methyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

ö

PAGE 2-A

RN345224-29-5 HCAPLUS CN

Carbamic acid, [[(5S)-3-[4-[4-[[(4-aminobenzoyl)oxy]acetyl]-1-piperazinyl]-3-fluorophenyl]-2-oxo-5-oxazolidinyl]methyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

PAGE 2-A

RN 345224-30-8 HCAPLUS
CN Benzoic acid, 4-[[[[(9H-fluoren-9-ylmethoxy)carbonyl]amino]acetyl]amino]-,
2-[4-[4-[(5S)-5-[[[(1,1-dimethylethoxy)carbonyl]amino]methyl]-2-oxo-3oxazolidinyl]-2-fluorophenyl]-1-piperazinyl]-2-oxoethyl ester (9CI) (CA
INDEX NAME)

PAGE 1-B

PAGE 2-B

RN 345224-32-0 HCAPLUS

CN Benzoic acid, 4-[[[[(9H-fluoren-9-ylmethoxy)carbonyl]amino]acetyl]amino]-, 2-[4-[2-fluoro-4-[(5S)-2-oxo-5-[[(1-thioxopropyl)amino]methyl]-3-oxazolidinyl]phenyl]-1-piperazinyl]-2-oxoethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A

PAGE 1-B

PAGE 2-B

RN 345224-33-1 HCAPLUS

CN Benzoic acid, 4-[[(2S)-1-oxo-2-[[(phenylmethoxy)carbonyl]amino]propyl]amin o]-, 2-[4-[4-[(5S)-5-[[[(1,1-dimethylethoxy)carbonyl]amino]methyl]-2-oxo-3-oxazolidinyl]-2-fluorophenyl]-1-piperazinyl]-2-oxoethyl ester (9CI) (CA INDEX NAME)

RN 345224-35-3 HCAPLUS
CN Benzoic acid, 4-[[(2S)-1-oxo-2-[[(phenylmethoxy)carbonyl]amino]propyl]amin
o]-, 2-[4-[2-fluoro-4-[(5S)-2-oxo-5-[[(1-thioxopropyl)amino]methyl]-3oxazolidinyl]phenyl]-1-piperazinyl]-2-oxoethyl ester (9CI) (CA INDEX
NAME)

PAGE 2-A || S

RE.CNT 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

L37 ANSWER 21 OF 31 HCAPLUS COPYRIGHT 2006 ACS on STN AN 2000:384192 HCAPLUS

DN 133:30719

TI Oxazolidinone antibacterial agents having a thiocarbonyl functionality

IN Hester, Jackson B., Jr.; Nidy, Eldon George; Perricone, Salvatore Charles; Poel, Toni-jo

PA Pharmacia & Upjohn Company, USA

SO PCT Int. Appl., 183 pp.

CODEN: PIXXD2

DT Patent

LA English

FAN CNT 1

PAN.CNI I										
	PATENT NO.	KIND DATE	APPLICATION NO.	DATE						
ΡI	WO 2000032599	A1 20000608	WO 1998-US25308	19981127						
	W: AL, AM,	AT, AU, AZ, BA, BB,	BG, BR, BY, CA, CH,	CN, CU, CZ, DE,						
	DK, EE,	ES, FI, GB, GD, GE,	GH, GM, HR, HU, ID,	IL, IS, JP, KE,						
	KG, KP,	KR, KZ, LC, LK, LR,	LS, LT, LU, LV, MD, I	MG, MK, MN, MW,						
	MX, NO,	NZ, PL, PT, RO, RU,	SD, SE, SG, SI, SK,	SL, TJ, TM, TR,						
			ZW, AM, AZ, BY, KG, 1							
	RW: GH, GM,	KE, LS, MW, SD, SZ,	UG, ZW, AT, BE, CH, C	CY, DE, DK, ES,						

```
FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI,
             CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
                                 20000608
                                              CA 1998-2351062
                                                                      19981127
     CA 2351062
                           AA
     AU 9917053
                                 20000619
                                              AU 1999-17053
                                                                      19981127
                           A1
     AU 764980
                           B2
                                 20030904
                                                                      19981127
                                              EP 1998-961822
     EP 1133493
                           A1
                                 20010919
            AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
             IE, SI, LT, LV, FI, RO
     JP 2002531455
                           T2
                                 20020924
                                              JP 2000-585241
                                                                      19981127
     NZ 511963
                           Α
                                 20031031
                                              NZ 1998-511963
                                                                      19981127
PRAI WO 1998-US25308
                           W
                                 19981127
OS
     MARPAT 133:30719
GI
```

AB The title compds. (I) [wherein Z2 = SO2, S(O), S, O, or (un)substituted NH; n = 0-3; R23 and R24 = independently H or F; R1 = H, NH2, NH(alkyl), N(alkyl)2, aziridinyl, azetidinyl, pyrrolidinyl, piperidinyl, alkyl(thio), alkoxy(carbonyl), CN, or cycloalkyl] were prepared by various methods, including conversion of the corresponding amides to (alkyl)thioureas or thioamides. Replacement of the O atom with S atom unexpectedly improved the antimicrobial properties of the compds. For example, II was prepared by treating the corresponding acetamide with Lawesson's Reagent. II inhibited growth of tested gram pos. organisms at concns. 2-4 times lower than the comparison carbonyl-containing compound

IC ICM C07D417-10

ICS A61K031-42; C07D263-20; C07D413-10

CC 28-6 (Heterocyclic Compounds (More Than One Hetero Atom)) Section cross-reference(s): 1

5415-95-2P, Methyl dithiopropionate ΙT 101184-85-4P 168828-65-7P 168828-67-9P 198410-25-2P 216869-07-7P 216869-05-5P 216869-09-9P 216869-10-2P 216869-11-3P 216869-12-4P 216869-13-5P 216869-14-6P 216869-15-7P 216869-16-8P 216869-18-0P 216869-19-1P 216869-20-4P 216869-21-5P 216869-22-6P 216869-23-7P 216869-25-9P 216869-26-0P 216869-27-1P 216869-28-2P 216869-29-3P 216869-30-6P 216869-31-7P 216869-32-8P 216869-33-9P 216869-34-0P 216869-35-1P 216869-37-3P 216869-39-5P 216869-40-8P 216869-41-9P 216869-42-0P 216869-43-1P 216869-44-2P **216869-45-3P** 216869-47-5P 216869-48-6P 216869-49-7P 216869-50-0P 273376-93-5P 273376-94-6P 273376-95-7P 273376-96-8P 273376-97-9P 273376-98-0P 273376-99-1P 273377-00-7P 273377-01-8P 273377-02-9P 273377-03-0P 273377-04-1P 273377-08-5P RL: RCT (Reactant); SPN (Synthetic preparation); PREP

(Preparation); RACT (Reactant or reagent)

(preparation of antibacterial oxazolidinone (alkyl)thioamides or thioureas from the corresponding amides or amines)

IT 216869-45-3P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP

(Preparation); RACT (Reactant or reagent)

(preparation of antibacterial oxazolidinone (alkyl)thioamides or thioureas from the corresponding amides or amines)

RN 216869-45-3 HCAPLUS

CN Carbamic acid, [[(5S)-3-[3,5-difluoro-4-[4-[(phenylmethoxy)acetyl]-1piperazinyl]phenyl]-2-oxo-5-oxazolidinyl]methyl]-, phenylmethyl ester
(9CI) (CA INDEX NAME)

Absolute stereochemistry.

## RE.CNT 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

L37 ANSWER 22 OF 31 HCAPLUS COPYRIGHT 2006 ACS on STN

AN 2000:26717 HCAPLUS

DN 132:207679

TI Synthesis and in vitro antibacterial activity of quaternary ammonium cephalosporin derivatives bearing oxazolidinone moiety

AU Chung, In Hwa; Kim, Choong Sup; Seo, Jae Hong; Chung, Bong Young

CS Biochemicals Research Center, Korea Institute of Science and Technology, Seoul, 130-650, S. Korea

SO Archives of Pharmacal Research (1999), 22(6), 579-584 CODEN: APHRDQ; ISSN: 0253-6269

PB Pharmaceutical Society of Korea

DT Journal

LA English

GI

$$\begin{array}{c|c} & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & &$$

AB Several oxazolidinones having amine moiety were prepared to form a quaternary ammonium salt with cephalosporin nucleus, and antibacterial activity of the quaternary ammonium cephalosporin derivs. (e.g., I) bearing oxazolidinone moiety were examined particularly with expectation of dual activity. However, the cephalosporin-oxazolidinone compds. revealed rather weaker antibacterial activity in vitro than their parent oxazolidinone and cephalosporin without showing any characteristic activity as expected.

CC 26-5 (Biomolecules and Their Synthetic Analogs)
 Section cross-reference(s): 1, 10

IT 260262-90-6P 260262-91-7P **260262-92-8P** 260262-93-9P 260262-94-0P 260262-95-1P 260262-96-2P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)

(synthesis and antibacterial activity of quaternary ammonium oxazolidinonocephalosporin derivs.)

IT 260262-92-8P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)

(synthesis and antibacterial activity of quaternary ammonium oxazolidinonocephalosporin derivs.)

RN 260262-92-8 HCAPLUS

CN Piperazinium, 1-[4-[(5S)-5-[(acetylamino)methyl]-2-oxo-3-oxazolidinyl]-2-fluorophenyl]-1-[[(6R,7R)-7-[[(2Z)-(2-amino-4-thiazolyl)(methoxyimino)acetyl]amino]-2-carboxy-8-oxo-5-thia-1-azabicyclo[4.2.0]oct-2-en-3-yl]methyl]-4-(1-pyrrolidinylacetyl)-, inner salt (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry as shown.

L37

AU 9941571

AU 753988

BR 9910971

EP 1082323

RE.CNT 9 THERE ARE 9 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

ANSWER 23 OF 31 HCAPLUS COPYRIGHT 2006 ACS on STN

A1

B2

Α

A2

1999:795810 HCAPLUS AN DN 132:35694 ΤI Oxazolidinone derivatives, process for their preparation and pharmaceutical compositions containing them as antibiotics IN Gravestock, Michael Barry PA Zeneca Limited, UK so PCT Int. Appl., 188 pp. CODEN: PIXXD2 DT Patent English LA FAN.CNT 1 PATENT NO. KIND DATE APPLICATION NO. <u>-</u> - - -ΡI WO 9964417 A2 19991216 WO 1999-GB1753 19990603 WO 9964417 **A**3 20000203 AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM RW: GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG CA 2333332 AA 19991216 CA 1999-2333332 19990603

19991230

20021031

20010213

20010314

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,

AU 1999-41571

BR 1999-10971

EP 1999-925188

19990603

19990603

19990603

		IE, S	I, LT,	LV, F	I, RO			
	TR	200003595		T2	20010723	TR	2000-20000359	19990603
	EE	200000707		Α	20020415	EE	2000-707	19990603
	JP	2002517498		T2	20020618	JP	2000-553426	19990603
	NZ	508174		Α	20031031	NZ	1999-508174	19990603
	ZA	2000006694		Α	20020218	ZA	2000-6694	20001118
	BG	105001		A	20010928	BG	2000-105001	20001129
	NO	2000006152		Α	20010202	NO	2000-6152	20001204
	US	6617339		B1	20030909	US	2000-719012	20001205
	US	2003144263		A1	20030731	US	2003-340526	20030109
PRAI	GB	1998-12021		A	19980605			
	GB	1998-20164		Α	19980917			
	GB	1998-26066		Α	19981128			
	WO	1999-GB175	3	W	19990603			
	US	2000-71901	2	B1	20001205			•
OS GI	CAS	SREACT 132:	35694;	MARPA	T 132:3569	4		•

$$Q-N$$
O
 $X-Het$  I

AB Title compds. I and their pharmaceutically-acceptable salts and in-vivo-hydrolyzable esters are described [wherein, for example: X = O or S; Het = (un) substituted C-linked 5-membered heteroaryl ring containing 2 to 4 heteroatoms independently selected from N, O, and S; Q = (for example) certain substituted phenyls, 2-pyridyls, or 1,2,5,6-tetrahydropyrid-4-The compds. are useful as antibacterial agents, and have good activity against a broad range of Gram-pos. pathogens, including organisms known to be resistant to most commonly known antibiotics. For instance, 5(R)-[(isoxazol-3-yloxy)methyl]-3-[4-(1,2,5,6-tetrahydropyrid-4-yl)-3,5difluorophenyl]oxazolidin-2-one (preparation given) underwent N-acylation by (R,S)-2,3-0-isopropylideneglyceric acid using EDC and Et3N in CH2Cl2 (39%), followed by deprotection with HCl in aqueous THF (80%), to give title compound II. Against coagulase-neg. staphylococci, II had an MIC (µg/mL) of 0.13 for methicillin-sensitive strains, and 0.50 for methicillin-resistant strains.

IC ICM C07D413-14

ICS C07D417-14; C07F009-6558; C07D413-12; C07D487-08; C07D451-02; A61K031-42; A61K031-44; C07D487-08; C07D209-00; C07D209-00

CC 28-6 (Heterocyclic Compounds (More Than One Hetero Atom))
 Section cross-reference(s): 1, 10

```
SACKEY 10/717237 06/05/2006
                                   Page 132
                                                  252259-91-9P
                                                                  252259-92-0P
IT
     252259-87-3P
                    252259-88-4P
                                   252259-89-5P
                                                                  252260-03-0P
     252259-93-1P
                    252259-94-2P
                                   252259-98-6P
                                                  252260-00-7P
                                                                  252260-09-6P
     252260-04-1P
                    252260-06-3P
                                   252260-07-4P
                                                  252260-08-5P
     252260-10-9P
                    252260-11-0P
                                   252260-12-1P
                                                  252260-14-3P
                                                                  252260-15-4P
     252260-16-5P
                    252260-19-8P
                                   252260-20-1P
                                                  252260-21-2P
                                                                  252260-22-3P
     252260-23-4P
                    252260-25-6P
                                   252260-27-8P
                                                  252260-28-9P
                                                                  252260-29-0P
     252260-30-3P
                    252260-32-5P
                                   252260-34-7P
                                                  252279-68-8P
                                                                  252279-70-2P
     252279-71-3P
                    252279-72-4P
                                   252279-73-5P
                                                  252279-75-7P
                                                                  252279-77-9P
     252279-78-0P
                    252279-79-1P
                                   252279-80-4P
                                                  252279-82-6P
                                                                  252279-84-8P
     252279-85-9P
                    252279-86-0P
                                   252279-87-1P
                                                  252279-88-2P
                                                                  252279-90-6P
     252279-91-7P
                    252279-92-8P
                                   252279-93-9P
                                                  252279-94-0P
     252279-95-1P
                    252279-96-2P
                                   252279-97-3P 252279-99-5P
                    252280-01-6P
     252280-00-5P
                                   252280-05-0P
                                                  252280-07-2P
                                                                  252280-08-3P
     252280-09-4P
                    252280-10-7P
                                   252280-11-8P
                                                  252280-12-9P
                                                                  252280-13-0P
                                                                  252318-91-5P
     252280-14-1P
                    252280-15-2P
                                   252280-16-3P
                                                  252318-89-1P
                                                                  252319-06-5P
     252318-93-7P
                    252318-95-9P
                                   252318-97-1P
                                                  252319-00-9P
                                                                  252320-32-4P
     252320-16-4P
                    252320-24-4P
                                   252320-29-9P
                                                  252320-30-2P
     252320-37-9P
                    252320-39-1P
                                   252320-42-6P
                                                  252320-44-8P
                                                                  252320-47-1P
     252320-48-2P
                    252320-51-7P
                                   252320-65-3P
                                                  252320-74-4P
                                                                  252320-82-4P
     252320-86-8P
                    252320-87-9P
                                   252320-88-0P
                                                  252320-89-1P
                                                                  252320-90-4P
     252320-92-6P
                    252320-93-7P
                                   252320-96-0P
                                                  252320-97-1P
                                                                  252320-99-3P
     252321-15-6P
                    252321-16-7P
                                   252321-17-8P
                                                  252321-20-3P
                                                                  252321-21-4P
     252321-23-6P
                    252321-24-7P
                                   252328-62-4P
                                                  252328-63-5P
                                                                  252328-64-6P
     252328-67-9P
                    252328-68-0P
                                   252328-69-1P
                                                  252328-71-5P
                                                                  252328-73-7P
     252328-76-0P
                    252328-78-2P
    RL: BAC (Biological activity or effector, except adverse); BSU (Biological
     study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use);
    BIOL (Biological study); PREP (Preparation); USES (Uses)
        (preparation of antibiotic oxazolidinone derivs.)
IT
     252279-95-1P 252279-99-5P
    RL: BAC (Biological activity or effector, except adverse); BSU (Biological
     study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use);
    BIOL (Biological study); PREP (Preparation); USES (Uses)
        (preparation of antibiotic oxazolidinone derivs.)
RN
     252279-95-1 HCAPLUS
CN
     Piperazine, 1-[2-fluoro-4-[(5R)-5-[(3-isoxazolyloxy)methyl]-2-oxo-3-
     oxazolidinyl]phenyl]-4-(1H-imidazol-4-ylacetyl)-, dihydrochloride (9CI)
```

Absolute stereochemistry.

(CA INDEX NAME)

## •2 HCl

RN 252279-99-5 HCAPLUS

CN Piperazine, 1-[2-fluoro-4-[(5R)-5-[(3-isoxazolyloxy)methyl]-2-oxo-3-oxazolidinyl]phenyl]-4-(4-morpholinylacetyl)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

L37 ANSWER 24 OF 31 HCAPLUS COPYRIGHT 2006 ACS on STN

AN 1999:194131 HCAPLUS

DN 130:223265

TI Preparation of N-(2-oxothiazolidin-5-ylmethyl)thiourea derivatives as antibacterial agents

```
Yoshida, Toshihiko; Tokuyama, Ryukou; Tomita, Yayoi
IN
PA
       Hokuriku Seiyaku Co., Ltd., Japan
SO
       PCT Int. Appl., 137 pp.
       CODEN: PIXXD2
DT
       Patent
       Japanese
LA
FAN.CNT 1
       PATENT NO.
                                     KIND
                                               DATE
                                                                 APPLICATION NO.
                                                                                                    DATE
                                     ----
PΙ
       WO 9912914
                                      A1
                                               19990318
                                                                WO 1998-JP4074
                                                                                                    19980910
             W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, HR, HU, ID, IL, IS, KE, KG, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ,
             PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI,
                   CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
       JP 11158164
                                      A2
                                               19990615 JP 1998-272500
                                                                                                    19980909
                                     A1
       AU 9890015
                                               19990329
                                                                 AU 1998-90015
                                                                                                    19980910
PRAI JP 1997-265054
                                               19970911
                                     Α
       WO 1998-JP4074
                                      W
                                               19980910
os
       MARPAT 130:223265
GI
```

Ι

AB Antimicrobial thiourea derivs. of general formula (I) or salts thereof: (wherein R1, R2, and R3 are each hydrogen, alkyl, cycloalkyl, nitrogen-protecting group, alkoxycarbonylalkyl or the like; and R is Ph which may be substituted by halogeno, hydroxyl, mercapto, amino, cyano, nitro, carboxyl, carbamoyl, alkyl, cycloalkyl, alkoxy, alkylamino, alkanoyl, arylcarbonyl, aryl, aralkyl, aryloxy, cycloalkyloxy containing a hetero-atom as a ring atom, a saturated heterocyclic group or the like) are prepared Also claim is an antibacterial agent, in particular against gram pos. bacteria, containing I as the active ingredient. These thiourea derivs. exhibit excellent antibacterial activity against not only normal bacteria but also resistant strains of bacteria, e.g. methicillin-resistant Staphylococcus aureus (MRSA). Thus, addition reaction of (R) - [2-oxo-3-[4-(thiomorpholin-4-yl)phenyl]oxazolidin-5-yl]methyl isothiocyanate with NH3 in MeOH at room temperature for 9 h gave I [R =4-(thiomorpholin-4-yl)phenyl, R1 = R2 = R3 = H]. I [R = 3-fluoro-4-(pyrrolidino-1-yl)phenyl, R1 = R2 = R3 = H] showed min. inhibitory concentration of 0.39 μg/mL against MRSA HPC1336 and Enterococcus faecalis HPC948 and HPC975. IC ICM C07D263-20

ICM C07D263-20
ICS C07D413-10; C07D417-10; A61K031-42; A61K031-425; A61K031-495; A61K031-535
CC 28-7 (Heterocyclic Compounds (More Than One Hetero Atom))

```
Section cross-reference(s): 1
                                   216868-92-7P
IT
     216868-65-4P
                    216868-66-5P
                                                   221201-99-6P
                                                                  221202-01-3P
     221202-04-6P
                    221202-06-8P
                                    221202-08-0P
                                                   221202-11-5P
                                                                  221202-13-7P
     221202-15-9P
                    221202-17-1P
                                   221202-19-3P
                                                   221202-21-7P
                                                                  221202-25-1P
     221202-27-3P
                    221202-28-4P
                                   221202-30-8P
                                                   221202-31-9P
                                                                  221202-33-1P
                                                                  221202-41-1P
                    221202-37-5P
                                   221202-39-7P
     221202-35-3P
                                                   221202-40-0P
     221202-42-2P
                                                                  221202-46-6P
                    221202-43-3P
                                   221202-44-4P
                                                   221202-45-5P
     221202-47-7P
                    221202-48-8P
                                   221202-49-9P
                                                   221202-50-2P
                                                                  221202-51-3P
     221202-52-4P
                    221202-53-5P
                                   221202-54-6P
                                                   221202-55-7P
                                                                  221202-56-8P
     221202-57-9P
                    221202-58-0P
                                   221202-59-1P
                                                   221202-60-4P
                                                                  221202-62-6P
     221202-63-7P
                    221202-64-8P
                                   221202-65-9P
                                                   221202-66-0P
                                                                  221202-67-1P
     221202-68-2P
                    221202-69-3P
                                   221202-70-6P
                                                   221202-71-7P
                                                                  221202-72-8P
     221202-73-9P
                    221202-74-0P
                                   221202-75-1P
                                                   221202-76-2P
                                                                  221202-77-3P
                    221202-79-5P
     221202-78-4P
                                   221202-80-8P
                                                   221202-81-9P
                                                                  221202-82-0P
     221202-83-1P
                                   221202-85-3P
                    221202-84-2P
                                                   221202-86-4P
                                                                  221202-87-5P
     221202-88-6P
                                   221202-90-0P
                    221202-89-7P
                                                   221202-91-1P
                                                                  221202-92-2P
     221202-93-3P
                    221202-94-4P
                                   221202-96-6P 221202-97-7P
     221202-98-8P
                    221202-99-9P
                                   221203-00-5P
                                                   221203-01-6P
                                                                  221203-02-7P
     221203-03-8P
     RL: BAC (Biological activity or effector, except adverse); BSU (Biological
     study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use);
     BIOL (Biological study); PREP (Preparation); USES (Uses)
        (preparation of N-(oxothiazolidinylmethyl)thiourea derivs. as antibacterial
        agents)
IT
     221202-97-7P
     RL: BAC (Biological activity or effector, except adverse); BSU (Biological
     study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use);
     BIOL (Biological study); PREP (Preparation); USES (Uses)
        (preparation of N-(oxothiazolidinylmethyl)thiourea derivs. as antibacterial
        agents)
RN
     221202-97-7 HCAPLUS
CN
     Piperazine, 1-[2-fluoro-4-[(5S)-5-[[[(methylamino)thioxomethyl]amino]methy
```

1]-2-oxo-3-oxazolidinyl]phenyl]-4-[(phenylmethoxy)acetyl]- (9CI)

Absolute stereochemistry. Rotation (-).

INDEX NAME)

## RE.CNT 8 THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

- L37 ANSWER 25 OF 31 HCAPLUS COPYRIGHT 2006 ACS on STN
- AN 1998:794995 HCAPLUS
- DN 130:38373
- TI Preparation of thiocarbonyloxazolidinones as antibacterial agents
- IN Hester, Jackson B., Jr.; Nidy, Eldon George; Perricone, Salvatore Charles;
  Poel, Toni-jo
- PA Pharmacia & Upjohn Company, USA; Hester, Jackson B., Jr.
- SO PCT Int. Appl., 118 pp.
- CODEN: PIXXD2
- DT Patent
- LA English
- FAN.CNT 2

GI

FAN.CNI 2																		
							APPLICATION NO.											
DT																		
				AU, AZ, BA, BB,		WO 1998-US9889												
		W :						GE,										
							•	LR,	•	•		•		•	•	•	•	-
								RU,										
			-				-	YU,		SE,	36,	31,	SK,	ъu,	10,	IM,	ıĸ,	11,
				•		•	•	SD,		IIG	7.W	ልጥ	BE	СН	CV	DE	אמ	FC
		1011	FT	ਸ਼ੁਲ	GR	GP,	TE	IT,	T.TT	MC,	NIT.	DT	SE,	BF	B.T	CE,	CG,	CT
								NE,				11,	UL,	Dr,	ъ,	Cr,	co,	CI,
	ΑU	9874										998-	7488	3		1 .	9980	513
							B2 20010906			AU 1998-74883					23300323			
		2288								CA 1998-2288750						19980518		
	ΕP	98494	947 A1 2000															
	EР	EP 984947 B1			20050420													
		R:	ΑT,	BE,	CH,	DE,	DK,	ES,	FR,	GB,	GR,	IT,	LI,	LU,	NL,	SE,	MC,	PT,
								RO		•								
	BR	9815	518			Α		2000	1121	]							9980!	518
	NZ 501412 JP 2002501530			Α	. 20011130				NZ 1998-501412									
				T2	2 20020115			JP 1999-500722						19980518				
	RU 2208613			C2		2003	0720	RU 1999-128083										
		AT 293609 E			2005							19980518						
		ES 2242280 T3				2005	ES 1998-922303											
								20000128		]	NO 1	.999-!	5846			1	9991	129
		31579						2003										
		99025				A		1999:				999-						
		99110						20000				999-						
DDAT		10275						20040		J	HK 2	000-	1066	<del>)</del> 6		20	00010	023
PKAI		1997																
00		1998				W		1998	noTR									
05	MAL	RPAT :	130:3	503/.	5													

$$\begin{array}{c|c}
N & N \\
Me & S
\end{array}$$

$$\begin{array}{c|c}
N & N \\
N & N \\$$

```
ΑB
     Chiral title compds. AGCH2NHCSR [A is (un)substituted Ph, indolinyl; G is
     2-oxo-5-oxazolidinyl; R is H, NH2, alkyl, cycloalkyl, etc.] or
     pharmaceutical acceptable salts are prepared, from amines with Lawesson's
     Reagent or 1,1'-thiocarbonyldi-2(1H)-pyridone, as antibacterial agents.
     Title compds. I and II were tested in vitro by standard agar dilution method.
IC
     ICM C07D263-20
     ICS C07D417-12; C07D413-10; C07D413-04; A61K031-42; C07D261-04;
          C07D307-32; C07D471-10; C07D471-10; C07D235-00; C07D221-00
CC
     28-6 (Heterocyclic Compounds (More Than One Hetero Atom))
     Section cross-reference(s): 1
IT
     168828-65-7P
                   168828-67-9P
                                                                  216869-09-9P
                                   188974-73-4P
                                                  216869-07-7P
     216869-10-2P
                    216869-11-3P
                                   216869-13-5P
                                                  216869-14-6P
                                                                  216869-15-7P
                    216869-17-9P
     216869-16-8P
                                   216869-18-0P
                                                  216869-19-1P
                                                                  216869-20-4P
     216869-21-5P
                    216869-22-6P
                                   216869-23-7P
                                                  216869-25-9P
                                                                  216869-26-0P
                    216869-28-2P
     216869-27-1P
                                   216869-29-3P
                                                  216869-30-6P
                                                                  216869-31-7P
                    216869-33-9P
     216869-32-8P
                                   216869-34-0P
                                                  216869-35-1P
                                                                  216869-37-3P
     216869-38-4P
                    216869-39-5P
                                   216869-40-8P
                                                  216869-41-9P
                                                                  216869-42-0P
     216869-43-1P
                    216869-44-2P 216869-45-3P
                                                216869-46-4P
     216869-47-5P
                    216869-48-6P
                                   216869-49-7P
                                                  216869-50-0P
     RL: RCT (Reactant); SPN (Synthetic preparation); PREP
     (Preparation); RACT (Reactant or reagent)
        (preparation of thiocarbonyloxazolidinones as antibacterial agents)
TT
     216869-45-3P
     RL: RCT (Reactant); SPN (Synthetic preparation); PREP
     (Preparation); RACT (Reactant or reagent)
        (preparation of thiocarbonyloxazolidinones as antibacterial agents)
RN
     216869-45-3 HCAPLUS
CN
     Carbamic acid, [[(5S)-3-[3,5-difluoro-4-[4-[(phenylmethoxy)acetyl]-1-
    piperazinyl]phenyl]-2-oxo-5-oxazolidinyl]methyl]-, phenylmethyl ester
```

Absolute stereochemistry.

(CA INDEX NAME)

(9CI)

RE.CNT 8 THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

L37 ANSWER 26 OF 31 HCAPLUS COPYRIGHT 2006 ACS on STN

AN 1997:539252 HCAPLUS

DN 127:190756

TI Preparation of N-hydroxyacetyl-N'-oxooxazolidinylphenylpiperazines as antibacterials.

IN Brickner, Steven J.; Barbachyn, Michael R.; Hutchinson, Douglas K.

PA Pharmacia & Upjohn Co., USA

SO U.S., 12 pp., Cont.-in-part of U.S. Ser. No. 155,988, abandoned. CODEN: USXXAM

DT Patent

LA English

FAN.CNT 2

PAN.	CNT 2			
	PATENT NO.	KIND DATE	APPLICATION NO.	DATE
ΡI	US 5652238	A 1997	0729 US 1996-640899	19960509
	WO 9514684	A1 1995	0601 WO 1994-US10582	19940927
	W: AM, AT, AU	, BB, BG, BR,	BY, CA, CH, CN, CZ, DE,	DK, EE, ES, FI,
	GB, GE, HU	, JP, KE, KG,	KP, KR, KZ, LK, LR, LT,	LU, LV, MD, MG,
	' MN, MW, NL	NO, NZ, PL,	PT, RO, RU, SD, SE, SI,	SK, TJ, TT, UA,
	US, UZ			
	RW: KE, MW, SD	SZ, AT, BE,	CH, DE, DK, ES, FR, GB,	GR, IE, IT, LU,
	MC, NL, PT	SE, BF, BJ,	CF, CG, CI, CM, GA, GN,	ML, MR, NE, SN,
	TD, TG		•	
PRAI	US 1993-155988	B2 1993	1122	
	WO 1994-US10582	W 1994	0927	
os	MARPAT 127:190756			
GI				

AB Title compds. [I; R = COR1, PO32-, PO3H2; R1 = alkyl, N(R4)2, alkyl-N(R4)2, C6H4N(R4)2, C6H4NHC(O)CH2NH2, C2H4-morpholinyl, pyridinyl, hydroxyalkyl, methoxyalkyl, acetylalkyl, methoxyalkoxy, piperazinyl, piperazinylalkyl (optionally substituted with alkyl), imidazolyl, carboxyalkyl, C(CH2OH) 2CH3; R2, R3 = H, F;  $\geq 1$  of R2, R3 = F; R4 =H, alkyl], were prepared Thus, hydroxyacetic acid, 2-[4-[4-[5-[(acetylamino)methyl]-2-oxo-3-oxazolidinyl]-2,6-difluorophenyl]-1piperazinyl]-2-oxoethyl ester (preparation given) showed an ED50 = 1 mg/kg orally against Staphylococcus aureus.

Ι

IC ICM A61K031-495

ICS A61K031-535; C07D413-10; C07D413-14

INCL 514235800

CC 28-17 (Heterocyclic Compounds (More Than One Hetero Atom)) Section cross-reference(s): 1

170104-51-5P IT 170104-50-4P 170104-52-6P 170104-53-7P 170104-54-8P 170104-55-9P 170104-56-0P 170104-57-1P 170104-58-2P 170104-59-3P 170104-60-6P 170104-61-7P 170104-62-8P 170104-63-9P 170104-64-0P 170104-65-1P 170104-67-3P 170104-68-4P 170104-69-5P 170104-70-8P 170104-71-9P 170104-72-0P 170104-73-1P 170104-74-2P 170104-75-3P 170104-76-4P 170104-77-5P

170104-78-6P 170104-79-7P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of N-hydroxyacetyl-N'-oxooxazolidinylphenylpiperazines as antibacterials)

IT 154590-82-6P 154590-83-7P 154590-84-8P 154590-85-9P 154590-86-0P 154590-87-1P 154590-88-2P 154591-02-3P 165800-04-4P 170104-81-1P

170104-87-7P 170104-88-8P 170104-89-9P

170104-90-2P 170104-92-4P 170104-93-5P

170104-94-6P 174649-08-2P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP

(Preparation); RACT (Reactant or reagent)

(preparation of N-hydroxyacetyl-N'-oxooxazolidinylphenylpiperazines as antibacterials)

IT 170104-56-0P 170104-57-1P 170104-70-8P

170104-77-5P 170104-78-6P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of N-hydroxyacetyl-N'-oxooxazolidinylphenylpiperazines as antibacterials)

RN 170104-56-0 HCAPLUS

Benzoic acid, 4-(dimethylamino)-, 2-[4-[4-[5-[(acetylamino)methyl]-2-oxo-3-CN oxazolidinyl]-2-fluorophenyl]-1-piperazinyl]-2-oxoethyl ester, (S)- (9CI) (CA INDEX NAME)

RN 170104-57-1 HCAPLUS

CN Benzoic acid, 4-(dimethylamino)-, 2-[4-[4-[5-[(acetylamino)methyl]-2-oxo-3-oxazolidinyl]-2,6-difluorophenyl]-1-piperazinyl]-2-oxoethyl ester, (S)-(9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 170104-70-8 HCAPLUS

CN Acetamide, N-[[3-[4-[4-[(4-aminobenzoyl)oxy]acetyl]-1-piperazinyl]-3-fluorophenyl]-2-oxo-5-oxazolidinyl]methyl]-, (S)- (9CI) (CA INDEX NAME)

RN 170104-77-5 HCAPLUS

CN Benzoic acid, 4-[[(dimethylamino)acetyl]amino]-, 2-[4-[4-[5-[(acetylamino)methyl]-2-oxo-3-oxazolidinyl]-2-fluorophenyl]-1-piperazinyl]-2-oxoethyl ester, (S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 170104-78-6 HCAPLUS

CN Benzoic acid, 4-[(aminoacetyl)amino]-, 2-[4-[4-[5-[(acetylamino)methyl]-2-oxo-3-oxazolidinyl]-2-fluorophenyl]-1-piperazinyl]-2-oxoethyl ester, (S)-(9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 170104-89-9 HCAPLUS
CN Phosphoric acid, 2-[4-[4-[5-[(acetylamino)methyl]-2-oxo-3-oxazolidinyl]-2-fluorophenyl]-1-piperazinyl]-2-oxoethyl bis(phenylmethyl) ester, (S)-(9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 170104-90-2 HCAPLUS
CN Acetamide, N-[[3-[3-fluoro-4-[4-[[(4-nitrobenzoyl)oxy]acetyl]-1-piperazinyl]phenyl]-2-oxo-5-oxazolidinyl]methyl]-, (S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 170104-92-4 HCAPLUS

CN Acetic acid, (phenylmethoxy)-, 2-[4-[4-[5-[(acetylamino)methyl]-2-oxo-3-oxazolidinyl]-2-fluorophenyl]-1-piperazinyl]-2-oxoethyl ester, (S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 170104-93-5 HCAPLUS

CN Acetic acid, (phenylmethoxy)-, 2-[4-[4-[5-[(acetylamino)methyl]-2-oxo-3-oxazolidinyl]-2,6-difluorophenyl]-1-piperazinyl]-2-oxoethyl ester, (S)-

(9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 170104-94-6 HCAPLUS

CN Benzoic acid, 4-[[[(phenylmethoxy)carbonyl]amino]acetyl]amino]-, 2-[4-[4-[5-[(acetylamino)methyl]-2-oxo-3-oxazolidinyl]-2-fluorophenyl]-1piperazinyl]-2-oxoethyl ester, (S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 174649-08-2 HCAPLUS

SACKEY 10/717237 06/05/2006 Page 146

```
L37 ANSWER 27 OF 31 HCAPLUS COPYRIGHT 2006 ACS on STN
ΑN
     1997:369757 HCAPLUS
DN
     126:343482
     Preparation of 5-(acetamidomethyl)-3-aryldihydrofuran-2-one and
ΤI
     tetrahydrofuran-2-one derivatives with antibiotic activity
IN
     Gravestock, Michael Barry
PA
     Zeneca Limited, UK; Gravestock, Michael Barry
so
     PCT Int. Appl., 79 pp.
     CODEN: PIXXD2
DT
     Patent
LA
     English
FAN.CNT 1
     PATENT NO.
                         KIND
                                DATE
                                            APPLICATION NO.
                         ----
ΡI
     WO 9714690
                         A1
                                19970424
                                            WO 1996-GB2504
         W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE,
             DK, EE, ES, FI, GB, GE, HU, IL, IS, JP, KE, KG, KP, KR, KZ, LC,
             LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT,
             RO, RU, SD, SE, SG, SI, SK, TJ, TM, TR, TT, UA, UG, US, UZ, VN,
             AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
         RW: KE, LS, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR,
             IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG
    AU 9672248
                          A1
                                19970507
                                           AU 1996-72248
    EP 858453
                          A1
                                19980819
                                           EP 1996-933552
                                                                    19961015
            AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
             IE, FI
    JP 11513680
                          T2
                                19991124
                                            JP 1996-515591
                                                                    19961015
PRAI GB 1995-21508
                          Α
                                19951020
    WO 1996-GB2504
                                19961015
os
    MARPAT 126:343482
GΙ
```

AB Furanone compds. of formula I [R1, R2 = H, F; R3, R4 = H, Me; A = O, S, SO, SO2, (substituted) NH] are prepared as antibacterial agents. Thus, II was prepared in 8 steps from thiomorpholine, 3,4-difluoroacetophenone, and (S)-(2,2-dimethyl-1,3-dioxan-4-yl)iodomethane. II showed activity against Staphylococcus aureus, coagulase neg. Staphylococcus, Streptococcus pyogenes, Enterococcus faecalis and Bacillus subtilus.

IC ICM C07D307-32

ICS C07D307-58; A61K031-34; A61K031-535; A61K031-54

CC 27-6 (Heterocyclic Compounds (One Hetero Atom))

Section cross-reference(s): 1

IT 163733-55-9P 189763-48-2P 189763-49-3P 189763-50-6P 189763-51-7P 189763-52-8P 189763-53-9P 189763-54-0P 189763-55-1P 189763-56-2P 189763-57-3P 189763-58÷4P 189763-59-5P 189763-60-8P 189763-61-9P 189763-62-0P 189763-63-1P 189763-65-3P 189763-66-4P 189763-67-5P 189763-68-6P 189763-69-7P 189763-70-0P 189763-71-1P 189763-72-2P 189763-73-3P 189763-74-4P 189763-75-5P 189763-76-6P 189763-77-7P 189763-78-8P 189763-79-9P 189763-80-2P 189763-81-3P 189763-82-4P 189763-83-5P 189763-84-6P 189763-85-7P 189763-86-8P 189763-87-9P 189763-88-0P 189763-89-1P 189763-90-4P 189763-91-5P 189763-92-6P 189763-93-7P 189763-94-8P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP

(Preparation); RACT (Reactant or reagent)

(preparation of (acetamidomethyl)arylfuran-2-one derivs. with antibiotic activity)

IT 189763-93-7P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP

(Preparation); RACT (Reactant or reagent)

(preparation of (acetamidomethyl)arylfuran-2-one derivs. with antibiotic activity)

RN 189763-93-7 HCAPLUS

CN Acetamide, N-[[4-[3-fluoro-4-[4-[(phenylmethoxy)acetyl]-1-piperazinyl]phenyl]-2,5-dihydro-5-oxo-2-furanyl]methyl]-, (R)- (9CI) (CA INDEX NAME)

L37 ANSWER 28 OF 31 HCAPLUS COPYRIGHT 2006 ACS on STN

AN 1997:302929 HCAPLUS

DN 126:277463

TI Phenyloxazolidinones having a C-C bond to 4-8 membered heterocyclic rings, and their use as antimicrobials.

IN Hutchinson, Douglas K.; Ennis, Michael D.; Hoffman, Robert L.; Thomas, Richard C.; Poel, Toni-Jo; Barbachyn, Michael Robert; Brickner, Steven J.; Anderson, David J.

PA Upjohn Co., USA

SO PCT Int. Appl., 110 pp.

CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 3

FAN.CNT 3																				
										APPLICATION NO.										
PI						A1	A1 19970313			1	WO 1	.996-1		19960813						
		W: .	AL,	AM,	ΑT,	ΑU,	ΑZ,	BB,	ВG,	BR,	BY,	CA,	CH,	CN,	CZ,	DE,	DK,	EE,		
			ES,	FI,	GB,	GE,	HU,	IL,	IS,	JP,	KE,	KG,	ΚP,	KR,	ΚZ,	LK,	LR,	LS,		
			LT,	LU,	LV,	MD,	MG,	MK,	MN,	MW,	MX,	NO,	ΝZ,	PL,	PT,	RO,	RU,	SD,		
			SE,	SG,	SI,	SK,	TJ,	TM,	TR,	TT,	UA,	ŪĠ,	US,	UΖ,	VN,	AM,	ΑZ,	BY,		
			KG,	ΚZ,	MD,	RU,	TJ,	TM												
		RW:	KE,	LS,	MW,	SD,	SZ,	ŪĠ,	ΑT,	BE,	CH,	DE,	DK,	ES,	FI,	FR,	GB,	GR,		
			ΙE,	IT,	LU,	MC,	NL,	PT,	SE,	BF,	ВJ,	CF,	CG,	CI,	CM,	GA				
	CA					AA 19970313				CA 1996-2228647							19960813			
	ΑU	9667181				<b>A1</b>	A1 19970327			AU 1996-67181							19960813			
						B2 20000224														
	EΡ	856002				A1 19980805			0805	EP 1996-927316						19960813				
	ΕP	85600	2		B1			2001												
		R: .	ΑT,	BE,	CH,	DE,	DK,	ES,	FR,	GB,	GR,	IT,	LI,	LU,	NL,	SE,	MC,	PT,		
			•	•	•	LV,														
	CN	11974	57			Α	A 19981028			CN 1996-197155							19960813			
	$^{\rm CN}$	10722	22			В	20011003													
	BR	96104	74			Α	A 19990302			BR 1996-10474										
	JΡ	11512	386			T2 199910			1026	JP 1996-511190										
		31546																		
		21753				C2		2001		RU 1998-105678										
		20748				E		20011115		AT 1996-927316					19960813					
						<b>T</b> 3				ES 1996-927316										
		28348								SK 1998-195										
	_	18652	_					2004				.996-:								
		96069				Α	19980216			ZA 1996-6935						19	9960	815		
	TW 419468				В	20010121			TW 1996-85110539							19960829				

SACKI	EΥ	10/717237	06/05/2006	Page	149			
	FI	9800452	Α	1998022	7 FI	1998-452	19980227	
	NO	9800855	A	1998043	0 NO	1998-855	19980227	
	NO	311520	B1	2001120	3			
	US	6166056	A	2000122	6 US	1998-138205	19980824	
	HК	1014946	A1	2002030	1 HK	1999-100058	19990107	
	US	6051716	A	2000041	8 US	1999-247346	19990210	
	US	6043266	A	2000032	8 US	1999-313468	19990517	
	US	6313307	B1	2001110	6 US	2000-518788	20000303	
	US	6358942	В1	2002031	9 US	2000-713670	20001115	
	US	2005054683	A1	2005031	o US	2003-470575	20030322	
PRAI		1995-3149P	P	1995090				
		1996-696313		1996081	_			
		1996-US1276	_	1996081	-			
		1998-138205		1998082	_			
		1999-247347		1999021				
		2000-518701		2000030				
os		RPAT 126:277		2000000	,			
GI	1.17-71	KFAI 120:2//	403					
GI								

## \* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT \*

Compds. of formula I, or their pharmaceutically acceptable salts, are AB claimed [wherein X = NR1, S(0)g, or O; R1 = H, C1-6 alkyl [(un)substituted with 1 or more OH, cyano, or halo], arylalkyl, acyl, CO2H or derivs., acyl, heterocyclyl, etc.; R2 = H, C1-6 alkyl, aralkyl, halo; R3, R4 = H or halo; R5 = H, C1-12 (halo)alkyl, C3-12 cycloalkyl, C1-6 alkoxy; m, n = 0-5; (m+n) = 1-5]. The compds. are useful as antimicrobial agents. For instance, Et cyanoacetate was arylated with 3,4-F2C6H3NO2 and alkylated with MeI (100%), followed by hydrogenation of the nitrile and nitro groups (97%), cyclization to an azetidinone (60%), reduction of the amide carbonyl, protection of both ring and sidechain N atoms as the di-Cbz derivative (51%), lithiation with BuLi, and reaction with (R)-glycidyl butyrate (64%), to give intermediate alc. II. This alc. was converted to its mesylate ester (100%), which was ammonolyzed, followed by N-acetylation (84%), hydrogenolysis (99%), and reaction with Me chloroformate (77%), to give title compound III. This compound had an ED50 comparable to vancomycin (5.00 mg/kg vs. 3.00 mg/kg, resp.) against Staphylococcus aureus, in vivo in mice.

```
IC ICM C07D413-10
```

ICS A61K031-42; C07D417-14

CC 28-6 (Heterocyclic Compounds (More Than One Hetero Atom))
 Section cross-reference(s): 1, 63

IT 188974-03-0P 188974-24-5P 188974-04-1P 188974-26-7P 188974-27-8P 188974-29-0P 188974-30-3P 188974-40-5P 188974-41-6P 188974-42-7P 188974-45-0P 188974-46-1P 188974-48-3P 188974-49-4P 188974-51-8P 188974-52-9P 188974-53-0P 188974-54-1P 188974-57-4P 188974-59-6P 188974-60-9P 188974-62-1P 188974-64-3P 188974-65-4P 188974-68-7P 188974-69-8P 188974-77-8P 188974-80-3P 188974-82-5P 188974-85-8P 188974-86-9P 188974-87-0P 188974-91-6P 188974-92-7P 188975-89-5P RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation);

RACT (Reactant or reagent); USES (Uses)
(preparation of (heterocyclylphenyl)oxazolidinone derivs. as antibacterials)
IT 188974-27-8P 188974-30-3P 188974-46-1P
188974-53-0P

Absolute stereochemistry. Rotation (-).

RN 188974-30-3 HCAPLUS
CN Acetamide, N-[[3-[3-fluoro-4-[1-[(phenylmethoxy)acetyl]-4-piperidinyl]phenyl]-2-oxo-5-oxazolidinyl]methyl]-, (S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

RN 188974-46-1 HCAPLUS
CN Acetamide, N-[[3-[3,5-difluoro-4-[1-[(phenylmethoxy)acetyl]-4-piperidinyl]phenyl]-2-oxo-5-oxazolidinyl]methyl]-, (S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

RN 188974-53-0 HCAPLUS
CN Acetamide, N-[[(5S)-3-[3-fluoro-4-[1-[(phenylmethoxy)acetyl]-3-pyrrolidinyl]phenyl]-2-oxo-5-oxazolidinyl]methyl]- (9CI) (CA INDEX NAME)

L37 ANSWER 29 OF 31 HCAPLUS COPYRIGHT 2006 ACS on STN

AN 1996:537790 HCAPLUS

DN 125:221870

TI (Piperazinylphenyl) oxazolidinone antimicrobials

IN Hutchinson, Douglas K.; Barbachyn, Michael R.; Brickner, Steven J.; Gammill, Ronald B.; Patel, Mahesh V.

PA Upjohn Co., USA

SO U.S., 19 pp., Cont.-in-part of U.S. Ser. No. 880, 432, abandoned. CODEN: USXXAM

DT Patent

LA English

FAN. CNT 2

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
ΡI	US 5547950	· A	19960820	US 1994-332822	19941031
	HU 72296	A2	19960429	HU 1994-3208	19930421
	CZ 281884	В6	19970312	CZ 1994-2505	19930421
	PT 640077	T	20021129	PT 1993-912267	19930421
	ES 2180545	<b>T3</b>	20030216	ES 1993-912267	19930421
	ZA 9302855	A	19941024	ZA 1993-2855	19930422
	IL 105555	<b>A</b> 1	19980715	IL 1993-105555	19930429
	CN 1079964	A	19931229	CN 1993-105039	19930508
	CN 1044236	В	19990721		
	US 5700799	A	19971223	US 1996-610031	19960304
	LV 13075	В	20040120	LV 2003-70	20030626
PRAI	US 1992-880432	B2	19920508		
	US 1994-332822	A3	19941031		•
os	MARPAT 125:221870				
~-				•	

I

$$\begin{array}{c|c} Z & U & O \\ & (CH_2)_n & \\ & & (CH_2)_n \\ & & & \\ & &$$

AB Title compds. I or pharmaceutically acceptable salts thereof wherein: each n is independently 1 to 3; Y is chosen from, e.g., (a) C(O)C1-6 alkyl, C(0)OC1-6 alkyl or benzoyl, (b) N(R3)2 where R3 is independently hydrogen, C1-4 alkyl or Ph which can be substituted with one to three F, Cl, OCH3, OH, NH2, or C1-4 alkyl, wherein each occurrence of said C1-6 alkyl may be substituted with one or more F, Cl, Br, I, OR1, CO2R1, CN, SR1, or R1 (where R1 is a hydrogen or C1-4 alkyl); X and Z are independently C1-6 alkyl, C3-12 cycloalkyl or hydrogen, or X and Z form a C0-3 bridging group, preferably X and Z are hydrogen; U, V and W are independently C1-6 alkyl, F, Cl, Br, hydrogen or a C1-6 alkyl substituted with one or more of F, Cl, Br or I, preferably U and V are F and W is hydrogen; R is hydrogen, C1-12 alkyl, C3-12 cycloalkyl, C1-6 alkoxy, C1-6 alkyl substituted with one or more F, Cl, Br, I or OH; and q is 0 to 4 inclusive, are useful antimicrobial agents, effective against a number of human and veterinary pathogens, including multiply-resistant staphylococci and streptococci, as well as anaerobic organisms such as bacteroides and clostridia species, and acid-fast organisms such as Mycobacterium tuberculosis and Mycobacterium avium. Thus, e.g., arylation of piperazine with 3,4-difluoronitrobenzene afforded 1-(2-fluoro-4-nitrophenyl)piperazine; Boc protection followed by reduction provided 1-(tert-butoxycarbonyl)-4-(2fluoro-4-aminophenyl)piperazine; the latter was converted to the Cbz derivative and then allylated to give 1-(tert-butoxycarbonyl)-4-(2-fluoro-4benzyloxycarbonylallylamino)piperazine; dihydroxylation followed by cyclization afforded 3-[3-fluoro-4-(4-tert-butoxycarbonylpiperazin-1yl)phenyl]-5-hydroxymethyl-2-oxazolidinone; the 5-hydroxymethyl group was converted to a 5-acetylaminomethyl group by mesylation, azidification, hydrogenation, and acetylation; finally, Boc deprotection followed by treatment with MeO2CCl afforded oxazolidinone II which exhibited antibacterial activity ED50 of 1.8 mg/kg PO against S. aureus vs. 1.8 mg/kg SC for vancomycin, and 2.3 mg/kg PO against S. pyogenes vs. 2.6 mg/kg SC for clindamycin.

IC ICM C07D413-00 ICS A61K031-495

INCL 514252000

CC 28-17 (Heterocyclic Compounds (More Than One Hetero Atom))
 Section cross-reference(s): 1, 63

IT 154590-48-4P 154590-49-5P **181021-56-7P**RL: BAC (Biological activity or effector, except adverse); BSU (Biological

study, unclassified); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses) ((piperazinylphenyl)oxazolidinone antimicrobials) IT 154590-32-6P 154590-44-0P 154590-45-1P 154590-46-2P 154590-47-3P 154590-53-1P 154590-58-6P 154590-59-7P 154590-50-8P 154590-51-9P 154590-61-1P, U 97665 154590-67-7P 154590-70-2P 154590-72-4P 154590-73-5P 154590-75-7P 154590-77-9P 154590-79-1P 154590-81-5P 154590-90-6P 154590-91-7P 154590-92-8P 154590-93-9P 154590-94-0P 154590-95-1P 154590-97-3P 154590-99-5P 181021-53-4P 181021-58-9P 181021-64-7P 181021-76-1P 181021-80-7P 181021-87-4P 181228-27-3P RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses) ((piperazinylphenyl)oxazolidinone antimicrobials) IT 181021-56-7P RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses) ((piperazinylphenyl)oxazolidinone antimicrobials) ВM 181021-56-7 HCAPLUS CN Acetamide, N-[[3-[3-fluoro-4-[4-[1-oxo-5-(phenylmethoxy)pentyl]-1piperazinyl]phenyl]-2-oxo-5-oxazolidinyl]methyl]- (9CI) (CA INDEX NAME)

Page 154

$$C$$
 (CH<sub>2</sub>)  $_4$  - O - CH<sub>2</sub> - Ph

IT 181021-64-7P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses) ((piperazinylphenyl)oxazolidinone antimicrobials)

RN 181021-64-7 HCAPLUS

CN Carbamic acid, [2-[4-[4-[5-[(acetylamino)methyl]-2-oxo-3-oxazolidinyl]-2-fluorophenyl]-1-piperazinyl]-2-oxoethyl]-, phenylmethyl ester (9CI) (CA INDEX NAME)

L37 ANSWER 30 OF 31 HCAPLUS COPYRIGHT 2006 ACS on STN

AN 1996:58412 HCAPLUS

DN 124:232297

TI Synthesis and Antibacterial Activity of U-100592 and U-100766, Two Oxazolidinone Antibacterial Agents for the Potential Treatment of Multidrug-Resistant Gram-Positive Bacterial Infections

AU Brickner, Steven J.; Hutchinson, Douglas K.; Barbachyn, Michael R.; Manninen, Peter R.; Ulanowicz, Debra A.; Garmon, Stuart A.; Grega, Kevin C.; Hendges, Susan K.; Toops, Dana S.; et al.

CS Upjohn Laboratories, Upjohn Company, Kalamazoo, MI, 49001, USA

SO Journal of Medicinal Chemistry (1996), 39(3), 673-9 CODEN: JMCMAR; ISSN: 0022-2623

PB American Chemical Society

DT Journal

LA English

AR Bacterial resistance development has become a very serious clin. problem for many classes of antibiotics. The 3-aryl-2-oxazolidinones are a relatively new class of synthetic antibacterial agents, having a new mechanism of action which involves very early inhibition of bacterial protein synthesis. Two potent, synthetic oxazolidinones, U-100592 [i.e., (S)-N-[[3-[3-fluoro-4-[4-(hydroxyacetyl)-1-piperazinyl]phenyl]-2-oxo-5oxazolidinyl]methyl]acetamide] and U-100766 [i.e., (S)-N-[[3-[3-fluoro-4-(4-morpholinyl)phenyl]-2-oxo-5-oxazolidinyl]methyl]acetamide] were prepared, which are currently in clin. development for the treatment of serious multidrug-resistant Gram-pos. bacterial infections caused by strains of staphylococci, streptococci, and enterococci. The in vitro and in vivo (po and i.v.) activities of U-100592 and U-100766 against representative strains are similar to those of vancomycin. U-100592 and U-100766 demonstrate potent in vitro activity against Mycobacterium tuberculosis. A novel and practical asym. synthesis of (5S)-(acetamidomethyl)-2oxazolidinones was developed and was employed for the synthesis of U-100592 and U-100766. This involved the reaction of Nlithioarylcarbamates with (R)-glycidyl butyrate, resulting in excellent yields and high enantiomeric purity of the intermediate (R) -5-(hydroxymethyl) -2-oxazolidinones.

CC 28-6 (Heterocyclic Compounds (More Than One Hetero Atom))
Section cross-reference(s): 1, 10

SACKEY 10/717237 06/05/2006 Page 156

IT 2689-39-6P 93246-53-8P 154590-33-7P 168828-81-7P 168828-82-8P 168828-84-0P 174649-03-7P 174649-04-8P 174649-05-9P 174649-06-0P 174649-07-1P 174649-08-2P 174649-09-3P RL: RCT (Reactant); SPN (Synthetic preparation); PREP
(Preparation); RACT (Reactant or reagent) (preparation and bactericidal activity of U-100592 and U-100766) IT 174649-08-2P RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent) (preparation and bactericidal activity of U-100592 and U-100766) RN 174649-08-2 HCAPLUS Acetamide, N-[[3-[3-fluoro-4-[4-[(phenylmethoxy)acetyl]-1-CN piperazinyl]phenyl]-2-oxo-5-oxazolidinyl]methyl]-, (S)- (9CI) (CA INDEX

Absolute stereochemistry.

L37 ANSWER 31 OF 31 HCAPLUS COPYRIGHT 2006 ACS on STN 1995:909447 HCAPLUS AN DN 123:314020 TI Esters of substituted-hydroxyacetyl piperazine phenyl oxazolidinones as antimicrobials IN Brickner, Steven J.; Barbachyn, Michel R.; Hutchinson, Douglas K. PA Upjohn Co., USA PCT Int. Appl., 35 pp. SO CODEN: PIXXD2 DT Patent LΑ English FAN.CNT 2 PATENT NO. APPLICATION NO. KIND DATE ----WO 9514684 PΙ A1 19950601 WO 1994-US10582 W: AM, AT, AU, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, EE, ES, FI, GB, GE, HU, JP, KE, KG, KP, KR, KZ, LK, LR, LT, LU, LV, MD, MG, MN, MW, NL, NO, NZ, PL, PT, RO, RU, SD, SE, SI, SK, TJ, TT, UA, US, UZ

RW: KE, MW, SD, SZ, AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU,

			•	NL, TG	PT,	SE,	BF,	ВJ,	CF,	CG,	CI	,	CM,	GA,	GN,	ML,	MR,	NE,	SN,	
	CA	217410	•			AA		1995	0601	(	CA	19	94 - 2	2174	107		1	9940	927	•
		217410							0412											
	AU	948010	3			<b>A1</b>		1995	0613	7	ΑU	19	94 - 8	3010	3		1	9940	927	
	ΑU	698699	)			B2		1998	1105											
	ΕP	730591				<b>A</b> 1	:	1996	0911	3	EΡ	19	94-9	312	78		1	9940	927	
	ΕP	730591				B1			0714											
		R: A	T,	BE,	CH,	DE,	DK,	ES,	FR,	GB,	GR	,	ΙE,	IT,	LI,	LU,	MC,	NL,	PT,	SE
	CN	113575	2			Α		1996	1113	(	CN	19	94 - 1	1942	41		1	9940	927	
	CN	104627	6			В	:	1999	1110											
	JP	095055	82			T2	:	1997	0603		JP	19	95-5	150	48		. 1	9940:	927	
	JP	369872	4			B2	:	2005	0921											
	AΤ	182142				E		1999	0715	1	AΤ	19	94-9	312	78		1	9940	927	
	ES	213358	8			T3		1999	0916	]	ES	19	94-9	312	78		1	9940	927	
	ZA	940788	5			Α		1996	0409		ZA	19	94 - 7	7885			1	9941	007	
	TW	427987				В	:	2001	0401	•	ΓW	19	94 - 8	3310	9509		1	9941	013	
	US	565223	8			A		1997	0729	τ	US	19	96-6	408	99		1	9960	509	
	GR	303142	0			Т3	:	2000	0131	(	GR	19	99-4	025	09		1	9991	007	
	LV	12538				В	:	2000	1220	. ]	LV	20	00-9	91			2	0000	714	
PRAI	US	1993-1	559	988		<b>A2</b>	:	1993	1122											
	WO	1994-U	Sl	0582		W	:	1994	0927											
os	MAF	RPAT 12	3:3	31402	20															
GI																				

$$RO-CH_2-CO-N$$
 $R^2$ 
 $O$ 
 $CH_2NHAC$ 
 $I$ 

AB Compds. I and pharmaceutically acceptable salts are claimed [wherein R = COR1, PO3, or P(O)(OH)2; R1 = C1-6 alkyl, N(R4)2, C1-6 alkyl-N(R4)2, -C6H4N(R4)2, C6H4NHCOCH2NH2, C2H4-morpholinyl, pyridinyl, C1-6 alkyl-OH, C1-6 alkyl-OMe, C1-6 alkyl-Ac, OC1-6 alkyl-OMe, C0-3 alkyl-piperazinyl (optionally substituted with C1-3), imidazolyl, C1-6 alkyl-CO2H, C(CH2OH)2CH3; R2 and R3 = H or F (1 or both must = F); R4 = H or C1-6 alkyl], and 30 examples were prepared and tested. The compds. are water soluble (data given), and are useful antimicrobial agents, effective against a number of human and veterinary pathogens, including multiply-resistant staphylococci, enterococci and streptococci, as well as anaerobic organisms such as bacteroides and clostridia species, and acid-fast organisms such as Mycobacterium tuberculosis. For example, reaction of (S) -N-[[3-[3-fluoro-4-(1-piperazinyl)phenyl]-2-oxo-5oxazolidinyl]methyl]acetamide with PhCH2OCH2COCl and Et3N gave I (R = PhCH2, R2 = H, R3 = F), which underwant hydrogenolysis over Pd/C to give 86.5% I (R = R2 = H, R3 = F). Reaction of this with carbonyldiimidazole in THF gave 82% I (R = Q, R2 = H, R3 = F) (II), which had aqueous solubility

mg/mL in phosphate buffer at pH 7. In a test against lethal infection of mice with Staphylococcus aureus, II had an oral and s.c. ED50 of 2 mg/kg, equivalent to that of vancomycin s.c. in the same test.

IC ICM C07D263-20

ICS C07F009-6558; A61K031-42; A61K031-675

CC 28-17 (Heterocyclic Compounds (More Than One Hetero Atom))

Acetamide, N-[[3-[4-[4-[(benzoyloxy)acetyl]-1-piperazinyl]-3-fluorophenyl]-

2-oxo-5-oxazolidinyl]methyl]-, (S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

170104-80-0 HCAPLUS

RN

CN

RN 170104-87-7 HCAPLUS

CN Acetamide, N-[[3-[3,5-difluoro-4-[4-[(phenylmethoxy)acetyl]-1-piperazinyl]phenyl]-2-oxo-5-oxazolidinyl]methyl]-, (S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 170104-89-9 HCAPLUS

CN Phosphoric acid, 2-[4-[4-[5-[(acetylamino)methyl]-2-oxo-3-oxazolidinyl]-2-fluorophenyl]-1-piperazinyl]-2-oxoethyl bis(phenylmethyl) ester, (S)-(9CI) (CA INDEX NAME)

RN 170104-90-2 HCAPLUS
CN Acetamide, N-[[3-[3-fluoro-4-[4-[(4-nitrobenzoyl)oxy]acetyl]-1-piperazinyl]phenyl]-2-oxo-5-oxazolidinyl]methyl]-, (S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 170104-92-4 HCAPLUS
CN Acetic acid, (phenylmethoxy)-, 2-[4-[4-[5-[(acetylamino)methyl]-2-oxo-3-oxazolidinyl]-2-fluorophenyl]-1-piperazinyl]-2-oxoethyl ester, (S)- (9CI)

(CA INDEX NAME)

Absolute stereochemistry.

RN 170104-93-5 HCAPLUS

CN Acetic acid, (phenylmethoxy)-, 2-[4-[4-[5-[(acetylamino)methyl]-2-oxo-3-oxazolidinyl]-2,6-difluorophenyl]-1-piperazinyl]-2-oxoethyl ester, (S)-(9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 170104-94-6 HCAPLUS

SACKEY 10/717237 06/05/2006

Page 162

CN Benzoic acid, 4-[[[[(phenylmethoxy)carbonyl]amino]acetyl]amino]-, 2-[4-[4-[5-[(acetylamino)methyl]-2-oxo-3-oxazolidinyl]-2-fluorophenyl]-1piperazinyl]-2-oxoethyl ester, (S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

IT 170104-70-8P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); PRP (Properties); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses) (preparation of esters of [[(hydroxyacetyl)piperazinyl]phenyl]oxazolidinones as antimicrobials)

RN 170104-70-8 HCAPLUS

CN Acetamide, N-[[3-[4-[4-[(4-aminobenzoyl)oxy]acetyl]-1-piperazinyl]-3-fluorophenyl]-2-oxo-5-oxazolidinyl]methyl]-, (S)- (9CI) (CA INDEX NAME)

IT 170104-56-0P 170104-57-1P 170104-77-5P

170104-78-6P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); PRP (Properties); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of esters of [[(hydroxyacetyl)piperazinyl]phenyl]oxazolidinones as antimicrobials)

170104-56-0 HCAPLUS RN

CNBenzoic acid, 4-(dimethylamino)-, 2-[4-[4-[5-[(acetylamino)methyl]-2-oxo-3oxazolidinyl]-2-fluorophenyl]-1-piperazinyl]-2-oxoethyl ester, (S)- (9CI) (CA INDEX NAME)

RN 170104-57-1 HCAPLUS

CN Benzoic acid, 4-(dimethylamino)-, 2-[4-[4-[5-[(acetylamino)methyl]-2-oxo-3-oxazolidinyl]-2,6-difluorophenyl]-1-piperazinyl]-2-oxoethyl ester, (S)-(9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 170104-77-5 HCAPLUS CN Benzoic acid, 4-[[(d:

Benzoic acid, 4-[[(dimethylamino)acetyl]amino]-, 2-[4-[4-[5-[(acetylamino)methyl]-2-oxo-3-oxazolidinyl]-2-fluorophenyl]-1-piperazinyl]-2-oxoethyl ester, (S)- (9CI) (CA INDEX NAME) Absolute stereochemistry.

RN 170104-78-6 HCAPLUS

CN Benzoic acid, 4-[(aminoacetyl)amino]-, 2-[4-[4-[5-[(acetylamino)methyl]-2-oxo-3-oxazolidinyl]-2-fluorophenyl]-1-piperazinyl]-2-oxoethyl ester, (S)-(9CI) (CA INDEX NAME)

d que => => 248 SEA FILE=REGISTRY ABB=ON (100632-57-3/BI OR 10133-88-7/BI OR L22 103-84-4/BI OR 103321-49-9/BI OR 103321-50-2/BI OR 105-56-6/BI OR 107-95-9/BI OR 108-30-5/BI OR 108-55-4/BI OR 109-01-3/BI OR 109-89-7/BI OR 110-91-8/BI OR 1118-68-9/BI OR 1138-80-3/BI OR 1142-20-7/BI OR 119152-42-0/BI OR 123-62-6/BI OR 154590-66-6/BI OR 15728-08-2/BI OR 174649-07-1/BI OR 188974-04-1/BI OR 273376-95-7/BI OR 29022-11-5/BI OR 298-12-4/BI OR 337910-24-4/B I OR 345224-36-4/BI OR 350-46-9/BI OR 3984-34-7/BI OR 415684-05 -8/BI OR 4521-28-2/BI OR 4530-20-5/BI OR 4619-20-9/BI OR 52240-17-2/BI OR 5415-95-2/BI OR 5466-84-2/BI OR 5473-15-4/BI OR 56-40-6/BI OR 5600-62-4/BI OR 570390-86-2/BI OR 57498-54-1/B I OR 577-59-3/BI OR 612056-04-9/BI OR 6328-00-3/BI OR 6340-79-0 /BI OR 68858-21-9/BI OR 6945-94-4/BI OR 697804-23-2/BI OR 697804-24-3/BI OR 697804-25-4/BI OR 697804-26-5/BI OR 697804-27 -6/BI OR 697804-28-7/BI OR 697804-29-8/BI OR 697804-30-1/BI OR 697804-31-2/BI OR 697804-32-3/BI OR 697804-33-4/BI OR 697804-34 -5/BI OR 697804-35-6/BI OR 697804-36-7/BI OR 697804-37-8/BI OR 697804-38-9/BI OR 697804-39-0/BI OR 697804-40-3/BI OR 697804-41 -4/BI OR 697804-42-5/BI OR 697804-43-6/BI OR 697804-44-7/BI OR 697804-46-9/BI OR 697804-48-1/BI OR 697804-49-2/BI OR 697804-50 -5/BI OR 697804-51-6/BI OR 697804-52-7/BI OR 697804-53-8/BI OR 697804-54-9/BI OR 697804-55-0/BI OR 697804-56-1/BI OR 697804-57 -2/BI OR 697804-58-3/BI OR 697804-59-4/BI OR 697804-60-7/BI OR 697804-61-8/BI OR 697804-62-9/BI OR 697804-63-0/BI OR 697804-64 -1/BI OR 697804-65-2/BI OR 697804-66-3/BI OR 697804-67-4/BI OR 697804-68-5/BI OR 697804-69-6/BI OR 697804-71-0/BI OR 697804-72 -1/BI OR 697804-73-2/BI OR 697804-74-3/BI OR 697804-75-4/BI OR 697804-76-5/BI OR 697804-77-6/BI OR 697804-78-7/BI OR 697804-79 -8/BI OR 697804-80-1/BI OR 697804-81-2/BI OR 697804-82-L38 164 SEA FILE=REGISTRY ABB=ON L22 AND 1/F L39 13062 SEA FILE=REGISTRY ABB=ON 2 46.383.1/RID L40 5 SEA FILE=REGISTRY ABB=ON L38 AND L39 1 SEA FILE=REGISTRY ABB=ON L40 AND C30H39FN6O5/MF L41 1 SEA FILE=HCAPLUS ABB=ON L41 L42 only / seference to to applicant => d 142 bib hitstr T.42 ANSWER 1 OF 1 HCAPLUS COPYRIGHT 2006 ACS on STN AN 2004:453033 HCAPLUS DN 141:23519 TI Preparation of N-[4-(piperazin-1-yl)-phenyl]-2-oxazolidinone-5-carboxamide derivatives for therapeutic use as antibacterial agents IN Harris, Christina R.; Hester, Jackson Boling, Jr. PA Pharmacia & Upjohn Company, USA SO PCT Int. Appl., 155 pp. CODEN: PIXXD2 DT Patent English LA FAN.CNT 1 PATENT NO. KIND APPLICATION NO. DATE DATE PΙ WO 2004045616 **A1** 20040603 WO 2003-IB5355 20031119 AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH,

CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC,

```
RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK,
               TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
     CA 2502017
                             AA
                                    20040603
                                                 CA 2003-2502017
                                                                            20031119
     AU 2003280143
                                    20040615
                                                  AU 2003-280143
                                                                            20031119
                             A1
     US 2004142939
                                    20040722
                                                  US 2003-717237
                             A1
                                                                            20031119
     EP 1565186
                                    20050824
                                                  EP 2003-772516
                             A1
                                                                            20031119
             AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
               IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK
                                                 BR 2003-16483
     BR 2003016483
                             Α
                                    20051011
                                                                            20031119
     JP 2006509035
                             T2
                                                  JP 2004-570322
                                    20060316
                                                                            20031119
PRAI US 2002-428025P
                             Р
                                    20021121
     US 2003-445530P
                             P
                                    20030206
     WO 2003-IB5355
                             W
                                    20031119
os
     MARPAT 141:23519
     697804-34-5P
ΙT
     RL: BSU (Biological study, unclassified); SPN (Synthetic preparation); THU
      (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES
         (preparation of N-[4-(piperazin-1-yl)-phenyl]-2-oxazolidinone-5-carboxamide
         derivs. for therapeutic use as antibacterial agents)
     697804-34-5 HCAPLUS
RN
CN
     Acetamide, N-[[(5S)-3-[3-fluoro-4-[4-[(4-[(4-methyl-1-
     piperazinyl)methyl]phenoxy]acetyl]-1-piperazinyl]phenyl]-2-oxo-5-
     oxazolidinyl]methyl] - (9CI) (CA INDEX NAME)
```